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SOCIOLOGY

THIRD EDITION

HOUGHTON MIFFLIN COMPANY
Boston · The Riverside Press Cambridge

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Foreword

Can a good revision of a scientific work be very extensive, when the content of science is reliable and enduring? We do not revise the multiplication table or the law of gases. A revision that produced a wholly new book would imply that the original was not very good or that its subject matter was not scientific. Ideas are more subject to radical change, to birth and decay, than is scientific knowledge.

The presentation of science does change, however, and in the following ways. There are additions. There are refinements in accuracy and precision. Since the body of knowledge is vast, selection in presentation is necessary. The basis of this selection changes according to the interest of the readers, the *Zeitgeist,* practical needs, and the demands of science itself.

We do not find that every new concept or idea in sociology is worth while. Of the new mechanical inventions patented, over 90 per cent are never used. So the passion for the new, which at times is quite fashionable, may quickly take us off solid ground.

Somewhat the same conclusion holds for the vocabulary of sociology. Many of its new words, like slang, thrive for a while and then drop out of use. "Social integration" replaces "social solidarity," which previously replaced "social cohesion." Perhaps these replacements are an improvement, though the concepts are much the same. So we like to use "design" instead of "outline," just as in the area of costume, "jacket" is the current usage instead of "coat."

The past decade, however, has led to the adoption of several terms and concepts that do facilitate classification and are useful in arranging our sociological knowledge. Illustrations are "role," "norm," and "social system." Such appropriate concepts we have made much use of in the revision.

With regard to the vocabulary of sociology, we have preferred as simple words as possible, holding that long abstract terms, though impressive to some, are often more obscure than profound.

The changes we have made in the third edition are as follows. We have added one entirely new chapter. We have rewritten completely several chapters, and all chapters have been rewritten in part. We have brought up to date the statistics on such matters as the birth rate, the size of family, and the records of deviant behavior. We have included more information from distant parts of

the world, for airplane and radio have shortened distances and time and have made much information about many countries common knowledge. We have added the results of new researches. By adopting new concepts, we have undertaken to make more evident the theoretical unity of the book; but we have not done this at the sacrifice of flexibility. Among the improvements has been the elimination of certain sections which teachers have found least useful. Thus the number of chapters has been reduced by two.

Much more use has been made of photographs, pictorial sketches, charts, diagrams, and maps. These aids have been added not so much for their artistic grace as for emphasis upon ideas and knowledge important to remember for examinations and for the years ahead after leaving college. For emphasis also, more headings of paragraphs point up the core idea of the paragraphs. For the same reason, our comments on each visual aid have been editorialized and made deliberately more suggestive than the text in general.

In recent years knowledge has been expanding rapidly; so the volume is large. At the same time sciences have been expanding their domain into territory previously thought not to be their proper province. Such is notably the case in geography, anthropology, and political science. A sociology text must therefore be broad in scope, and not restricted to an idea or concept which an enthusiast happens to think is the core or unifying principle of sociology.

There is a practical pedagogical problem of making a big factual book flexible and adaptable to the courses in introductory sociology, which vary in length from one quarter to two semesters, and to the varying requirements of the curricula of the different colleges.

In many colleges the first course in sociology covers a whole academic year. In these colleges there is no problem of adaptation. Where the course is a quarter or a semester, the problem has been met by omitting chapters or sections of chapters. We have therefore tried to keep the organization sufficiently loose to permit these omissions. Indeed, we think such omissions are advisable when the duration of the course is short.

Some teachers tell us, for instance, that they have omitted the chapter on biological factors where the students in their college are required to take a course in biology or a course in natural science, a part of which is biology. Omission of this chapter may in certain situations be necessary, but we think it is regrettable, for these biological courses or sections of natural science courses dealing with biology do not present much on the relation of biology to human society; and when such relationships are presented, they are often inadequate or even erroneous because biologists are usually not sufficiently acquainted with the cultural factor. Our chapter on the biological factor is not a chapter on biology but rather an analysis of the relationship of biology to society. In order

to make this chapter more adaptable, we have omitted much of the strictly biological material, not particularly relevant to human social behavior.

Some biology is quite necessary to understanding social life, as for instance, racial phenomena. Sociologists make use of existing knowledge from other sciences such as archaeology, anthropology, history, psychiatry, and economics insofar as they are useful in understanding society; just as physicists make use of chemistry and chemists make use of physics. Astronomy makes so much use of physics that a branch of it is called astrophysics. Geology depends increasingly on physics. Anthropology has grown up by drawing on archaeology, linguistics, anatomy, and genetics without being too circumspect about the sovereignty of boundary lines.

Similarly, sociology makes use of some knowledge from geography, and geography relies much on sociology. The chapter in our text on the geographical factor is not a chapter on geography but one on the contribution of geography to sociology.

To understand how and why we interact in society and how in the course of this interaction we have in the long years since early times developed the different social institutions requires a book of broad scope drawing on contributions from outside sciences.

The organization of such a book requires flexibility. Chapters, or parts of chapters, that may be appropriately omitted are those pertaining to subject matter in which the department of sociology offers advanced courses. Such are the chapters on population.

It should be remembered that not all students using this text in the first course in sociology will be sociology "majors," and not all will take advanced courses in sociology. In some colleges a large majority of students using this text will never have any other course in sociology, for they "major" in literature or chemistry or some other subject. The teacher has an obligation to these students, as well as to the future sociology majors. In these cases, if omissions must be made, it is advisable not to omit all of the two chapters on population, for instance, but only selected sections. The chapters were organized with this possibility in mind.

The problem of adjustment to the schedule of the curriculum is more easily met when the first full course in sociology is preceded by a general orientation course in social science. Then the teacher knows what will be duplication and what not.

Textbooks, like other inventions, evolve through improvement. Airplanes are much better today than the one in which the Wright brothers first flew at Kitty Hawk, North Carolina. We ought to be able to say the same of textbooks in sociology.

We close this foreword with a quotation from the preface to the first edition.

> A basic requirement of a textbook in sociology is to give the student knowledge that will be of use no matter what his occupation. Of the large number of students who take a course in sociology, few will ever become professional sociologists. The boys will become merchants, farmers, industrialists. Many of the girls will be too busy rearing a family to teach sociology or to do sociological research. All will, however, need to know how to live intelligently in the social world about them, and how to deal with the social problems that press in on them during the forty-five or fifty years that they will live. It will benefit them to get a balanced perspective of social life and social issues. If they know how the social order came to be what it is, they will be better prepared to direct the social changes ahead. This book is designed for the general college student who should become a leader of opinion and action in his community. Such a purpose, however, in no way detracts from the book as an introduction to the advanced work needed by those who would specialize in sociology.

Acknowledgments. In the preparation of this new edition, we have had the benefit of critical comments by Ernest Dalton of Centenary College for Women; William J. Goode of Columbia University; Charles M. Grigg and Lewis Killian of the Florida State University; John L. Haer of the Rand Corporation; the late Jerry A. Neprash of Franklin and Marshall College; Theodore M. Newcomb of the University of Michigan; Winfred G. Steglich of Texas Technological College; Tom Stine of Carroll College; Guy E. Swanson of the University of Michigan; Ralph H. Turner of the University of California at Los Angeles; and Rupert Vance of the University of North Carolina.

William F. Ogburn
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Sociology

Part One:

Introduction

The purpose of Part I is primarily to introduce the basic factors in the social life of men. By basic factors we mean those influences that make human social life possible. These are presented briefly in Chapter 2, as a basis for fuller discussion in later sections.

Since this book is concerned with the scientific study of human society, and because sociology is a young science, it seems desirable at the outset to understand what "scientific study" entails. Hence the initial chapter deals with the scientific method as applied to sociology. This chapter, it should be noted, does not aim to be a comprehensive and definitive essay on scientific method, which would probably be formal and dull and difficult to contain in a single brief chapter. Rather, the discussion is deliberately selective and suggestive, emphasizing a few big ideas in ways calculated to stress their great importance.

Sociology and Science

If you, reader, had been born several centuries ago before the age of modern science (and had lived) you would have grown up to believe that your king ruled by divine right; that hard times — now called business depressions — were punishment to your country for wrongdoing; that the toll of lives taken by the Black Death was the hand of Fate; and that victory or defeat in war was determined by the stars and could be foretold by examining the entrails of a chicken.

If you had attended a university, you could not have studied sociology, but you could have learned that the cause of social disorder was the displeasure of the deity. You could not have had an instructor in psychology, but you could have been taught that human behavior was due to the peculiarities of the mixture of four elements which made up every person, namely, earth, air, fire, and water. You could not have taken a course in biology, but you would have read that "there is a little beast that will extinguish fire should it fall into it, and that fire is not able to burn it, nor will trouble happen in the place where it will be." [1] Your curriculum would have been the trivium, "grammar, rhetoric and logic," and the quadrivium, "arithmetic, music, geometry and astronomy."

It is said that the scholastics of medieval times in Western Europe were wont to discuss whether two angels could stand on the point of a pin at the same time. This is no doubt an exaggeration with an excessive emphasis on the triviality of their arguments, and such a discussion would not be typical; but it does suggest the two dominant intellectual interests of this pre-scientific age, metaphysics and theology. Settlement of disputes was not by evidence, but by logic or appeal to such authorities as Aristotle or the sacred writings, which were richly documented by the scholastics with learned commentaries on their meanings. Roger Bacon (thirteenth century), an early voice of science, cried out, "Cease to be ruled by dogmas and authorities; look at the world." If Aristotle and the sacred writings said it all, there was no great encouragement to extend the bounds of knowledge, to learn something new, to progress.

THE BEGINNINGS OF SOCIAL SCIENCE

Science, the brilliant achievements of which spectacularly light up our times, did not come overnight. Great movements like democracy or science take a long time to develop. In their faltering beginnings they have to fight strong opposition.

Pioneer sociologists. The scientific movement was late in coming to sociology. It began in the physical sciences as characterized by modern methods three or four hundred years ago. Comte gave it a big

[1] Quoted by J. H. Breasted and J. H. Robinson, *History of Europe* (Rev. ed.; Boston: Ginn and Company, 1929).







1 **Auguste Comte, Herbert Spencer, and Lester Ward**
(Photographs by Brown Brothers.)

send-off. Isadore Auguste Marie François Comte was a rebellious French philosopher with a quarrelsome disposition but with a mind of great compass and daring and exceptional organizing ability. Progress owes much to rebels, but not all rebels are progressive.

Sociology was the last of the offspring of philosophy, and Auguste Comte officiated at its birth in 1842, the date of the publication of the last volume of his *Positive Philosophy*. To him, sociology was the grand over-all social science, the end result of the scientific movement. Sociology was late in coming because it must necessarily rest upon the achievements of other sciences. Sociology was to be built on observation rather than authority and speculation, a more commonplace statement now than then. These observations of sociologists, moreover, were to be based one upon another and properly systematized. However, very little was said about validating these observations or about how to measure the relationship between variables. Comte was a philosopher rather than a scientist, and he gave sociology a position in a new but important kind of philosophical system. His scientific emphasis was on observation and classification.

England, as well as France, had its founder of sociology, Herbert Spencer, who published his first volume of the *Principles of Sociology* in 1876. Spencer was rebellious, too, a noted individualist and a bachelor, who was presumably thus free to do field work, but instead developed his grand theory of evolution from his armchair. From the application of this theory to society came his sociology. Spencer in a conversation with Francis Galton admitted that (among his many accomplishments) he had written a tragedy. Galton said yes, he knew it. Surprised, Spencer said he had never published it or told anyone about it and wanted to know how Galton knew about it. Galton said he could even tell him what the tragedy

was: it was "a theory killed by a fact." In his theory of social evolution Spencer worked with facts, mainly anthropological, but used them as illustrations of his theory rather than deriving his theory from the facts. Still, scientifically he was a step in advance of the earlier Comte in that he used facts in constructing a sociology.

The United States had also its pioneer in sociology, Lester Ward, who published his *Dynamic Sociology* in 1882. He, too, had a mind of great range and covered a lot of territory (for a scientist) in his sociology. Such scope was to be expected of him, since he had been a geologist and a paleontologist. His last work, in six volumes, was called *Glimpses of the Cosmos.* Ward must have reacted against the slowness of geological change in paleontological times, for he, like Comte, lifted up his eyes and saw visions of a rapid improvement of society, the lead in which would be taken by sociology.

Comte, Spencer, and Ward were of heroic stature and wrote in an intellectually exhilarating age. From their platform of philosophy and general science they skyrocketed a conception of sociology that was grand. But this was in the beginning, and not much could be expected of them in the way of scientific method. In fact, not one of them did any scientific research or used measurement, which is so characteristic of scientific method in the natural sciences. They, like the philosophers, were systematizers of concepts. Scientific sociology in the middle of the twentieth century has grown and changed greatly since the times of these pioneers.

WHAT SCIENCE IS

The founding fathers of sociology wanted and expected sociology to be a science, as do the latter-day sociologists. What then is this science so eagerly sought in all social studies? It is easy to define but hard to understand if one seeks the richness of its meaning and the fullness of its importance. For this reason we write a whole chapter about it.

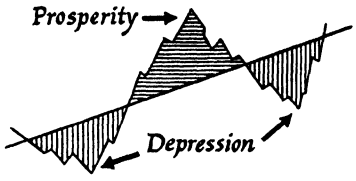
Indeed, the first problem for the sociology student is to learn what science is and how it differs from other kinds of mental work and other types of writing. It is more important, in the opinion of the authors, for the reader to know how sociology differs from literature than how it differs from economics or some other social science. It is also important to know what kind of thinking is scientific and what kind not, and to know, for instance, how scientific research differs from scholarly research. There is little, we think, a student can learn in college that is more worth while than what part science should play in his life.[2] But first he must know what science is.

Science is knowledge. The briefest definition is: science is knowledge. And the significance of science lies in the significance of knowledge as compared with beliefs, superstitions, and misinformation. For instance, we once thought that the culture of a people

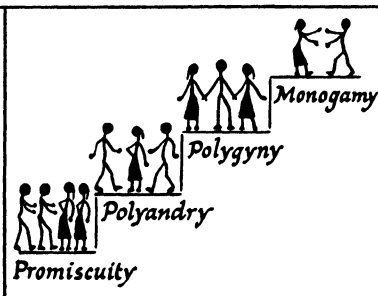
[2] For instance, the young student will soon come to learn how both safety and success rest upon good judgment, which may be defined as the ability to figure probabilities. In the language of mathematics, certainty has a probability of one. Certainty exists with reliable knowledge, the greatest achievement of science. But most of our actions are based upon less than certainty and call for judgment, for often we have only approximations to knowledge. Hence the expectations of good judgment have a probability of some fraction, say 9 out of 10, or 5 out of 10 — less than one. Scientific method deals with probabilities, and hence scientific knowledge helps us to figure chances, whether it be in locating a business, accepting a job, taking a wife, or rearing a child. Where the probability is less than certainty, we must separate scientific thinking from wishful thinking, which wrecks good judgment.

Since we do not live by science alone — though some foolishly try to do so — we want to know when to be scientific and when not. Do we want to be scientific in church, on the playground, or in the art museum?

So also in our intellectual outlook, which we come to college to get, it is desirable to understand what place science has in our system of values.



That business depressions could be eliminated by changing the gold content of the dollar. (Is government spending a similar fallacy?)



That the evolution of institutions must go through successive stages. (Must China's new factories have child labor and the sixteen-hour day?)



That the culture of a people is a measure of their inherent mental ability. (Must Africans be denied civilization for long ages until their inherited mental ability evolves?)

is an index of their racial ability, that the Eskimos and other peoples with less advanced cultures have less innate mental ability than the Europeans. We know now that this is false — a conclusion of first-rate importance for the harmonious living together of the peoples of the world.

Our mental stock of ideas has been badly cluttered with false notions. We once believed that killing a bull before battle would bring victory, that an albino had the mysterious power of telling where to dig a well to find water, or that kissing old bones restored health. When we think of all this useless or harmful mental debris that has burdened us through the long dark centuries, it is a great comfort to turn to the certainty of the knowledge upon which we can rely. When we read in the newspaper of the crash of an airliner against a mountain side with all occupants killed, or when a report tells us that deaths from diseases of the heart and from cancer are on the increase, it is comforting to turn to the knowledge that in the United States in 1955 the average expectancy of life at birth was 70.0 years as compared with 47.3 years in 1900. Knowledge not only brings certainty, or approximations thereto, but knowledge dispels the fear that comes from uncertainty.

Ideas and knowledge not the same. It is important to know that knowledge and ideas are not the same. For not all ideas are knowledge. There is an idea that a one-world government will prevent war; but we do not know that this idea is true. There is an idea that whether a person can go insane or not is determined by the time he is five years old. Perhaps some day this idea may be proved and become knowledge. Or again, it may be disproved. We do not now know. Again, some economists had an idea that business depressions could be prevented by varying the gold content of the dollar, but this hypothesis has been disproved. Perhaps only a small minority of hypotheses existing at any one time will ever be proved. During the 1930's, remedies for the deep depression of that decade were sent in to Washington, generally to the President, at the rate for a time of 300 a day. Practically all of them were worthless.

Not all ideas are concerned with proof or disproof. Some ideas are set going for amusement, or are dreams or wish fulfillments. Others are used to persuade or to frighten or to discipline or to create an attitude of reverence. Ideas are the material for intellectual activities; and very fascinating they are when no limitations on method are

imposed and various emotional attitudes are permitted. Thus we like to discuss what is the good life, the purpose in the universe, the nature of wisdom, etc.

Ideas are material for the social scientist as truly as for the intellectual who is not a scientist.[3] The social scientist needs imagination which will yield fresh insights and hypotheses. But socal scientists *qua scientists* deal with ideas for the sole purpose of ascertaining whether they are or can be turned into knowledge. Thus the scientist is much more restricted in dealing with ideas than the intellectual non-scientist.

Science Deals with Data

How does the social scientist tell whether ideas can become knowledge or not? Sometimes the many ideas extant are confusing and we want to know how to tell what is knowledge and what is not. Thus there are many theories of juvenile delinquency: the feeble-mindedness theory, the neurosis theory, the broken-home theory, and the learning-by-association theory. How can we prove which, if any, of these theories can be turned into knowledge?

The basic procedure is to collect facts on each theory and see whether the evidence supports the theory. Scientific work is then concerned with data as well as ideas. But data are not always easy to obtain, as, for instance, on life after death, or whether a utopia will be practical, or whether socialism will work better than capitalism.

The data of most physical sciences are relatively simple and can be encompassed in a laboratory; but in sociology data are usually obtained by field work, the collection of documents or of statistics. Often the acquisition of data is very costly and time-consuming. Thus it would be quite difficult to get data to show the effect moving pictures have had on manners and morals, or the trend in the changing influence of religion. Sociology has suffered in the past, and is handicapped today, for want of data to answer many of our questions.

Often we are under some pressure to reach a conclusion without having adequate evidence, as for instance in voting or in adopting a policy for an organization. As voters or executives, or merely as human beings in a crisis, we must often decide or act on incomplete evidence. We cannot wait until a scientist reaches a conclusion. The motto of a scientist is "suspended judgment," while the motto of the executive is "do it now!"

When the data are inadequate or not conclusive, bias, usually deriving from emotion,

FALLACIES

The populations of big cities of the United States are decreasing, because of the movement of residents to the suburbs.

Marriages in the United States increase in leap years.

Houses are more crowded in cities than on farms.

The ordinary American citizen cares more about our traditional liberties than our leaders do.

Negroes have less native mental ability than whites.

The atomic bomb is an "absolute" weapon.

Old people today live longer than the ancients of long ago.

The colored peoples of the world have been increasing more rapidly than the whites.

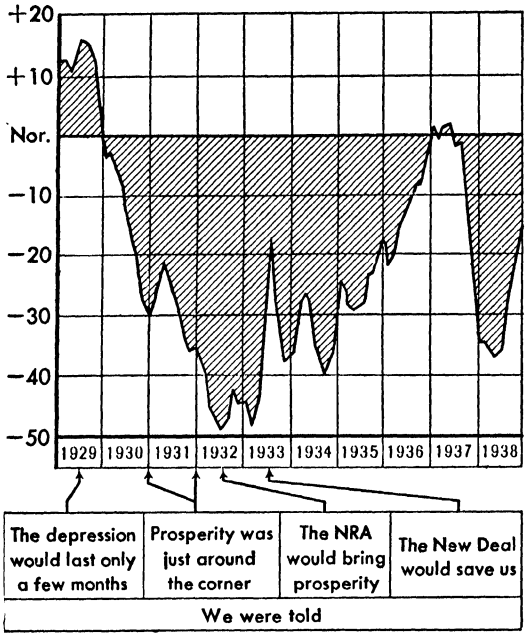
The death rate rises during business depressions.

Fuller knowledge about other nations promotes international good will.

3 Fallacious Beliefs Which Are Widely Held

Can you tell why each of the above is fallacious? What is the evidence?

[3] Robert Redfield, "The Art of Social Science," *American Journal of Sociology*, 54: 181–190, November 1948; Jessie Bernard, "The Art of Science: A Reply to Redfield," *American Journal of Sociology*, 55: 1–10, July 1949.



4 Wishful Thinking

When we do not have the evidence, we often substitute wishful thinking of some kind for science.

enters into any conclusion we reach and lessens its accuracy and reliability. Optimism is one of the most common of biases. Forecasts of the course of business have been shown [4] to be over-optimistic. Many business failures in merchandising stores are due to overstocking or beginning with too much overhead expense, largely in building and space, apparently because of a greater expectancy of business than proved to be the case.

Sociology deals with subjects toward which many of us react with considerable emotion, as we do to race questions, morals, religion, sex, family, crime, and poverty. These are subjects on which we often do not have good data. Hence in dealing with these subjects if we do not have conclusions based on data, and are not indifferent, we are very likely to be prejudiced; that is, we pre-judge the issue. The student who feels he must express an opinion, a prediction, or conclusion when he does not have full evidence, would do well to examine painstakingly his emotional attitudes to see whether these are influencing the opinion, prediction, or conclusion.

The distorting effect of bias. The effect of bias is to distort. This influence is clearly seen in the case of prediction, which, when it can be applied, is a singularly good test of knowledge. How prediction may be biased can be seen by a simple illustration. Each student in your sociology class will be given a grade at the end of the course. If each student is asked before the final grade is given what he thinks his final mark will be, the class as a whole, if it behaves the way other classes have behaved when given this test, will predict more high grades for themselves than they will actually receive.[5] This behavior is an indication of what is customarily called wishful thinking.

The purpose of science is to add to our knowledge by describing reality accurately. In the foregoing illustration reality was the actual grades the class received. The prediction of the grades the members of the class would receive was a distortion of reality in the direction of high marks. We thus say that the picture of reality the class carried in their heads was different from the actual picture of reality. Much of life consists of acting on a mental picture of reality. A challenge to all of us is to see that the picture of reality we carry in our heads resembles as closely as possible the actual picture of reality.

It should be noted that for many purposes we do not want the pictures we carry around in our heads to be like the pictures of reality.

[4] Hornell Hart, "Changing Opinions About Business Prosperity: A Consensus of Magazine Opinion in the United States, 1929–32," *American Journal of Sociology*, 38: 665–687, March 1933.

[5] W. F. Ogburn, "Studies in the Prediction and Distortion of Reality," *Social Forces*, 13: 224–229, December 1934.

Thus at times we wish to carry dream pictures in our heads. There is a legitimate function for daydreaming if not carried to excess. We can afford to daydream in our recreation but not in our sociology. The purpose of the theater and of the novel is to create fiction, which is different from reality. So too the artist may insist that his art is to be his impressions rather than a photograph. Impressionistic art is therefore a distortion of objective reality while the purpose of science is to furnish an exact reproduction. Therefore art and science point in different directions. We may want to be artists some of our lives and to be scientists only part of the time.

WHAT SCIENCE IS NOT

Science then is not art. And we have seen that scientific work is not the same as intellectual work. Science calls for thought, but we can do much thinking that is not scientific thinking. So also science is not the same as education, for education has learning as its purpose. To learn, we need to be stimu-

Victims Die in Torment of Mirages

YUMA, Aug. 6. — (U.P.) — A story of six days of intense suffering and death under a blistering desert sun was told today by Soccoro Cornejo, 19, an olive skinned girl who was one of two survivors of a party of nine persons stranded without water when their automobile stalled on El Camino del Diablo — the Highway of the Devil.

Miss Cornejo, recovering in a hospital here, and Francisco Flores, 23, in serious condition, were the only ones left alive of the party which started from Sonoyta, Mexico, for San Luis, Mexico, 120 miles away, on their way to the United States to work in fruit and vegetable fields.

The others died, one by one, some delirious from the desert heat, crying for water and stuffing sand in their mouths, noses and eyes when they saw mirages they thought were pools and streams of water.

Flores was the only one who had water since the truck stalled the first day out of Sonoyta, which according to Miss Cornejo's recollection was six days ago. He carried a small amount when he struck out for help. He got only five miles before he collapsed. He and Miss Cornejo were picked up by a truck driver yesterday.

"I saw no mirages," said Miss Cornejo. "I stayed by the truck and was quiet, even after the baby died."

The baby was Elisa Flores, 4, her niece, who died in Miss Cornejo's arms the first day from lack of water.

"Some of the others became crazy for water and saw mirages," she said. "They would run about and cry, 'Look at the pretty lake. Why don't you get some of the water? It's salty but good. It's beautiful. Oh, it's beautiful.'

"When they became too weak to stand, they begged me to get some for them. Then they stuffed sand in their mouths, eyes and noses, thinking it was water.

"I knew there was no water. I just sat quietly and made a shade for the baby with my hat. Later I screamed and cried a lot. I tried to attract attention but there was no one near."

They had no water, Miss Cornejo said, because an old man she identified only as "Yucopicio" had accidentally kicked over two cans, containing about 20 gallons, before the truck stalled. She said the truck ran out of gas, although they had put in 24 gallons and should have had more than enough to reach San Luis.

Water from the radiator could not be drunk, she said, because it was "poisoned." She said some compound, apparently cleaner, had been put in it a few days before.

5 Emotion Distorts Reality

(From *Los Angeles News*, August 8, 1941.)

lated or to be persuaded, activities with which science as such is not concerned. Science is concerned with creating knowledge, not dispensing it. As Graham Wallis remarked, there is a difference between making butter and spreading it.

The purpose of science is not wisdom, as many think, though scientific knowledge may help us in our search for wisdom. Solomon was reported to have been a wise man, but he knew little of science. Thus he said in the book of Proverbs:

> There be three things which are too wonderful for me,
> Yea, four which I know not:
> The way of an eagle in the air,
> The way of a serpent upon a rock,
> The way of a ship in the midst of the sea,
> And the way of a man with a maid.

But science has progressed far since the day of this man of wisdom. For science has given us answers to at least three of the questions that puzzled Solomon. As to the fourth, we know now that the male sex hormone differs from the female sex hormone (which is one reason why a maid differs from a man) by only 4 atoms of hydrogen and 1 of carbon. We may understand the difference between men and women without such scientific knowledge. And the scientific knowledge that male and female sex hormones differ by 4 atoms of hydrogen and 1 of carbon doesn't give us much understanding of "the way of a man with a maid."

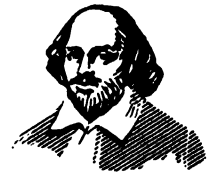
Science also differs from ethics, though the knowledge that comes from science should be helpful to us in our conduct. Different value systems and ethics are, of course, factors which, together with our knowledge, influence our conduct. Which is better, to live in a town or a large city? There are subjective factors in our choices, just as there are in a preference for the color yellow over purple. No amount of knowledge is likely to change one's preference from yellow to purple. But knowledge might affect the values underlying our preferences for life in a big city or a small town. Even with that knowledge there would remain values based upon subjective experience which would lead one person to prefer a city and another to choose a small town. Though scientific knowledge may greatly affect the values we choose — whether, for instance, we are radical or conservative — the object of science is not to create values any more than its object is to provide wisdom. This point is sometimes expressed in terms of the distinction between means and ends; that is, the function of science is often to furnish the means for achieving more effectively the goals set by our values. Tolstoy thought science was futile because it could give no answer to the

6 What Science Is Not

The purpose of science is to produce knowledge, not to produce wisdom, or understanding, or control, or ideas — though it is true that knowledge may help to make us wiser, to be more understanding, to aid us in controlling our environment, and to suggest ideas.



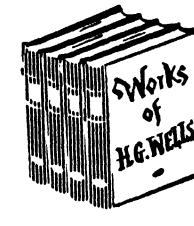
SOLOMON
was a wise man but not a scientist



SHAKESPEARE
had a great understanding but was not a scientist



NAPOLEON
exercised control without science



H. G. WELLS
was a man of ideas, but ideas are not science

questions — the only questions he deemed important — "What shall I do and how shall I live?"

In scientific sociology, the researchers often choose to try to discover new knowledge that will help the human race. Thus sociologists try to find out what causes crime. This represents a choice of subject matter with which to work. One may work with a given subject as a scientist, or in some other way; for instance, as a propagandist. The scientific sociologist chooses to work in a field primarily to acquire knowledge. This knowledge may be used in various ways. For instance, the knowledge of the causes of crime could conceivably be used to increase crime. Sociologists hope it will be used to decrease crime. Indeed, the sociologist may step out of his role of research scientist and, taking the role of citizen, educator, writer, or social engineer, use this knowledge of the causes of crime to try to reduce the amount of crime.

There is, however, such a thing as pure science; that is, scientific work undertaken without reference to its practical use. For instance, Hertzian waves were discovered without any reference to their use. It wasn't known that there was any use. Later they became the basis for the radio. Pure science, without any known practical use is not as common in sociology perhaps as in mathematics or physics or biology. Much knowledge about preliterate peoples is accumulated without reference to application, though the knowledge could be applied in the administration of colonial governments.

Social engineering is somewhat different from sociology. Colonial administration making use of sociological knowledge about preliterate peoples is an illustration of social engineering.[6] The systematic body of knowledge about communities, irrespective of its use, is a science, but social engineering is not.

Nor is the purpose of science necessarily control, as many claim. Astronomy is a highly developed science, yet does not plan to control the movement of the stars. In social relations, there is, of course, more opportunity for control; hence in sociology we certainly hope to use much of our knowledge for control purposes.

Knowledge is enduring. Scientific knowledge if it is reliable should be enduring. Such is the case. Ideas and theories are often overthrown, proved untrue; but knowledge endures. It was once thought that the evolution of marriage went through the necessary stages of promiscuity in sex relations, group marriage, marriage of one woman with several men, the marriage of several women to one man, and finally monogamy. Today we know that this theory of the evolution of marriage is not true. No knowledge was overthrown; only a theory was proved untrue.

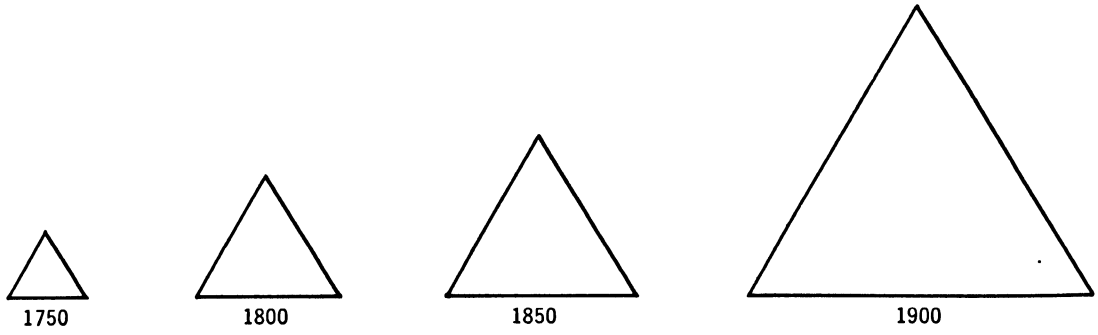
Knowledge is often refined, but this does not mean that the knowledge was disproved. For instance in England in 1927 [7] there were 665,000 births and 485,000 deaths. The population thus increased by 180,000. "Yet, incredible as it may sound, those 665,000 births of 1927 meant that each woman during her lifetime would give birth to but two children," [8] not enough even to maintain the population. But no knowledge was overthrown. It was simply refined by learning that in 1927 there was an unusual percentage of women of childbearing age, and that with a normal percentage the population would not have increased.

Sometimes theories or ideas or beliefs are claimed to be knowledge. A cure for cancer

[6] For an excellent discussion and illustration of social engineering, see Alexander Leighton, *Human Relations in a Changing World* (New York: E. P. Dutton & Co., Inc., 1949).

[7] Robert R. Kuczynski, *The Balance of Births and Deaths* (New York: The Macmillan Company, 1929), p. 22.

[8] *Ibid.*



7 The Growing Pile of Knowledge in Chemistry

The areas of the triangles represent the relative number of discoveries in prior years existing at given dates, assuming that none are lost. A similar accumulation exists in the other sciences for which we have statistics.

Knowledge endures. Ideas come and ideas go; but the winds of intellectual fashion cannot topple over a pile of scientific knowledge. The multiplication table is good anywhere, any time, for Communists as well as for Fascists, no matter what the intellectual climate. (Data from Harvey C. Lehman, "The Exponential Increase of Man's Cultural Output," *Social Forces*, 25:281–290, March 1947; based on T. P. Hilditch, *A Concise History of Chemistry*.)

was for a while announced every few weeks. To counteract the claim of knowledge where there are only hypotheses, sociologists try to hold rigorously to proof. Hence the insistence on verification, on a satisfactory answer to the question, "How do you know it?" — though few are as cautious as the scientist who upon hearing the remark of a fellow railroad traveler that the sheep they could see from the train window had already been sheared, replied that they had been sheared on one side certainly.

While scientific knowledge is enduring, very often sociological knowledge is not invariably true in all places and at all times. Thus the months of most marriages in England are in the spring and early summer. But at one time most marriages occurred there in the autumn.[9] Much knowledge in sociology is therefore not capable of being generalized as is the knowledge in physics, such as Newton's laws of motion which seem to be true everywhere. Some sociological knowledge is, however, very widely applicable. For instance, the knowledge that the birth rate in cities is lower than in the rural regions is true in the Orient and was true in the Middle Ages.[10]

Even though the findings of sociology are often limited in time and space because a cultural factor varies, still sociology like all sciences endeavors to discover laws that are generally applicable, regardless of variations in culture. Such a law, for instance, is the generalization that the social practices of a community are deemed right by the group because they are in the mores; not that the practices are in the mores because they are right.

SCIENCE AND SOCIOLOGY

The growing stockpile of sociological knowledge. Since knowledge is enduring, and fresh discoveries are made from time to time, knowledge accumulates. The stockpile of sociology, of which this book is an indication, may even at the present time be viewed

[9] Dorothy Thomas, "Changes in Marriage Seasons," *Economica*, 4: 97–106, 1924.

[10] A. J. Jaffe, "Urbanization and Fertility," *American Journal of Sociology*, 48: 48–60, July 1942.

with pride. In the future we expect it to be much bigger. And a great accumulation of reliable and enduring knowledge in sociology will be inconceivably useful and effective in attaining our objectives of the good life. To help accumulate quickly this growing stockpile of knowledge is a task sociologists undertake with enthusiasm and devotion. As Max Weber has stated, unless you have such a passion for knowledge, you have no calling for science and you should do something else.[11]

Students in colleges and universities are luckier than they know in being presented with the stock of knowledge we now have in sociology rather than with a pile of speculation, hodge-podge theories, and old wives' tales. But the stockpile is not complete, and a good deal of it is not perfect, only approximate. Some of it can be stated only in terms of probabilities. Much of it is in technical language and can hardly be simplified without loss of precision. Hence some of the stock concepts such as cause, variability, probable error, and constant factors need to be explained.

Description in Sociology

Much sociological knowledge is straightforward description of phenomena as, for instance, in a history or in a survey of a community. But not all people observe correctly. Even census-takers must be trained. So must historians and sociologists.

Selection. A big problem in description lies in what to describe. When the phenomena to be described are complex and varied and numerous, everything cannot be described. Hence selection. Descriptions of Russia by a capitalist and by a Communist might both be accurate but quite different. Another illustration is the description of the Neanderthal type of man who lived around 50,000 years ago in Europe. He could be described as having a sloping forehead, a flattened head, a ponderous face and a receding chin which gave him a more or less simian aspect. Or it could be said of him that he had strong teeth, a college athlete's shoulders and chest, eyes well-protected by brow ridges and a brain larger than that of modern man. Both descriptions would be true. One selection describes characteristics which suggest the ape; while the other emphasizes traits that are like those of a college graduate.

Verifiable descriptions. Scientific observations should be recorded in terms that are verifiable. For instance, the statement that "the population of India is increasing to ominous proportions" cannot be verified for there is no measure of "ominous." It is an opinion. On the other hand, the following statement can be verified: "From 1944 to 1954 the population of India increased by 47,000,000. In this decade India added to her people a population the size of France."

Descriptions of a sample. Since scientific work in sociology is often very expensive, social scientists resort to describing a sample instead of the whole. This sample should be large enough and representative. For instance, if we were describing opinion in the United States, it would be unwise to obtain data just from the daily press of the large cities. We would want to design a sample to include farm journals, labor papers, and other centers of opinion. And we would want to examine enough cases from each of these groups to be sure that what we have seen is typical. Description in science requires skill and training.

Measurement of Relationships

A large percentage of scientific work in sociology is more than description of phe-

[11] "Science as a Vocation," in *From Max Weber: Essays in Sociology,* ed. and tr. by H. H. Gerth and C. W. Mills (New York: Oxford University Press, 1946).



8 **Art and Science**

Science strives for precision, accuracy. Art is based on impression and selects traits for emphasis or exaggeration. By selection, the artist distorts the objective reality which the scientist struggles to preserve. Selection and emphasis heighten the emotional response and are the basis of the artist's insight and interpretation. In Low's sketches, we seem to have in Churchill an impishness resting in vision, ability, and wit. Roosevelt appears as the happy warrior, a little bloated by easy success. Eisenhower may be interpreted as showing simple wonder overshadowed by optimism. (Cartoons by Low.)

nomena. Much work concerns the relationship between two or more phenomena, as, for instance, the relationship between business conditions and the marriage rate. A common problem of this type is to ascertain the cause of a phenomenon. There is a great diversity of opinion on what we mean by cause, and not all writers employ the same definition.[12] It is desirable, then, for those who use this book to know exactly in what sense the authors will be employing the concept "cause."

Variables. Much work in sociology consists in trying to find the causes of a phenomenon such as war, crime, divorce, etc. The phenomenon of which we wish to find the cause is often a change from some prior or different condition. Thus war is a change from peace. The number of divorces just after World War II was 1 to every 3 marriages while before the war, in the 1930's, it was 1 to every 6 marriages. In all these cases there has been a change. Hence we speak of it as a variation, and the phenomenon is called a variable. The variation for which we wish to find a cause or causes is the variation from peace to war (in the above illustration), the increase in the divorce rate, or the decline in the number of cases of manslaughter.

Some of the increase in divorces after the war was caused by the many hasty marriages and some separations which the war occasioned. A postwar prosperity also contributed to the increase in divorces, since we know there are more divorces in prosperity than in depression. So we say a cause of the increase in divorce after the war was a change from peace to war. A change in one variable is explained by a change in another variable. When we study causes of a phenomenon, we study the relationship of two (or more) variables.

A constant factor is not a cause of change. If a variation is explained only in terms of another variation, it follows that a variation cannot be explained in terms of a constant, that is, a factor that did not change. Thus one cannot explain the phenomenon of the magnificent achievements of tennis play-

[12] Robert M. MacIver, *Social Causation* (Boston: Ginn and Company, 1942).

ers from California in recent years as caused by climate, wonderful though the California climate may be. Climate cannot be a cause of *the increase* in excellent tennis players from California, because it is a constant. The climate of California was the same in the 19th century when there were few top flight tennis players from California as it is in the 20th century when the galaxy of tennis players has been brilliant.

If the variable to be explained were the superiority of the tennis players from California over players from, say, Illinois, then it would be possible to consider climate as a cause, for the climate of California differs from the climate of Illinois and hence climate in this case is not a constant. We do not know, of course, that such a hypothesis would be proved correct.

While a constant cannot be a cause of a change in a variable, it may nevertheless be a factor in the variable. Thus the pugnacity "instinct" cannot be a cause of war because this biological factor is a constant, for the pugnacity drive in the population was the same in the peace years 1931–2 as in the war years 1941–2. Yet this biological drive is a factor in war since if it were absent we would not have wars. A phenomenon may have a large number of constant factors while at the same time a change in the phenomenon may have a much smaller number of causal factors.

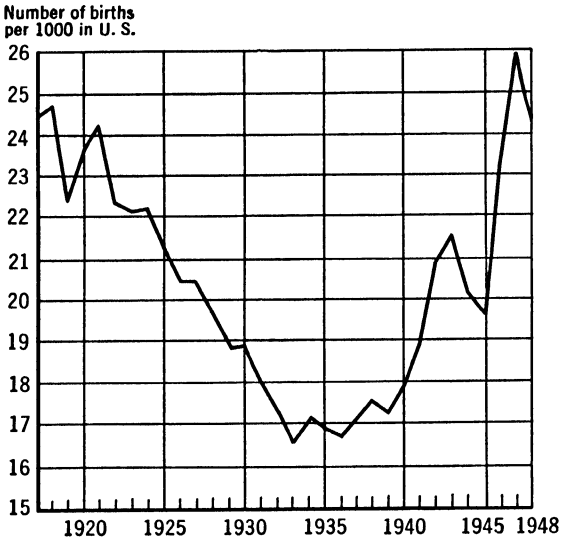
Most social phenomena have several causes. Modern society is quite complex and is changing all the time. Therefore, logically, a social phenomenon is likely to have many causes. Yet the human mind in its love of simplification often thinks in terms of only one cause. Many of us lay the origin of World War II to one cause, Hitler's ambition; or attribute the high standard of living in the United States to private capitalism; or explain the business cycle by sun spots. But phenomena usually have many causes, some of more importance, of course, than others. The causes of migration, for instance, are numerous; they may be economic opportunity, population pressure, religious persecution, transportation facilities, or the business cycle.

Phenomena must vary together for one to be a cause of the other. We have said that in the search for causes we ascertain relationships between variables. The first step is to determine whether there is simultaneous variation between the two variables. If we find the crime rate in cities of a certain size is about the same in cities that grow rapidly as in those that decrease or grow slowly, we conclude that the rate of growth of cities is not a cause of crime increase, for the crime rate is constant when the rate of growth varies for large numbers of cities.

On the other hand, if the sex ratio (number of men per 100 women) of cities is high in cities with a high crime rate and low in cities with a low crime rate, there is simultaneous variation; and we next inquire whether simultaneous variation involves causation.

Simultaneous variation does not prove that one variable is the cause of the other. The two phenomena may be independent of each other and the simultaneous variation may be due to other factors. Thus it has been shown that teachers' salaries are positively correlated with the consumption of beer in the United States, but no one believes a causal relationship is involved. They both increase in times of prosperity.

Moreover, when we suspect a causal relationship between two variables, the mere fact of concurrent variation does not of itself tell us which variable is cause and which effect. The sex ratio and the crime rate vary together, but this does not tell us whether the high sex ratio is the cause of the high crime rate or whether the high crime rate is the cause of the high sex ratio. It seems absurd to think that a high crime rate would cause an excess of men in a city, although



9 The Changing Birth Rate

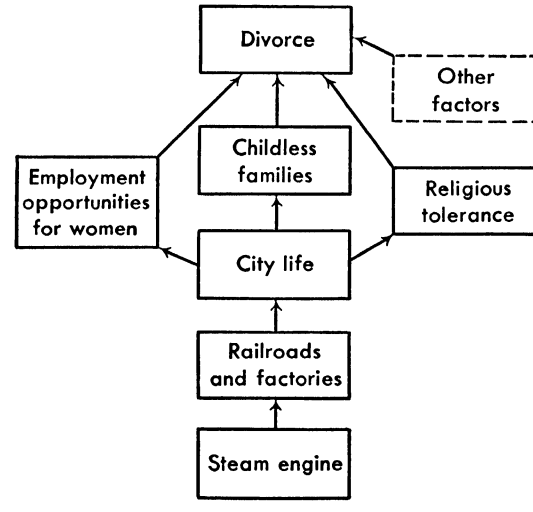
A change in a variable (the birth rate) cannot be explained by a constant (procreative ability or sexual urge).

it might conceivably do so by inducing women, to whom crime is obnoxious, to migrate. On the other hand, it may be that an excess of men would bring about an increase of crime, for we know that many more men than women are arrested for crime.

The variation in stature of fathers is correlated positively with the variation in stature of sons. Tall fathers have tall sons. But the correlation does not tell us which is the cause. From the statistics we have as much right to say the variation in the sons' stature causes the variation in the fathers'! But we argue that heredity is the cause, since the stature of a father is attained before a son is born. But there may be a third factor causing both, namely nutrition. For children of rich fathers are taller than children of poor fathers.

There are chains of causes; remote causes as well as proximate ones. If we pursue the causes still further and try to find out why men commit more crimes than women, we move on into another link in the chain of causes. This sequence of causes may be illustrated in the case of divorce, where a chain of causes may be traced as follows. More divorces occur in childless families than in families with children. There are more childless families in the cities than on the farms. Cities have appeared in great numbers where there are railroads and factories. Railroads and factories came only with the invention of the steam engine. It may therefore be said, depending on which link we choose in the chain of causes, that the absence of children causes divorce, or that cities are a cause, or that the increase in divorce is due in part to the invention of the steam engine. But it should be remembered that there are also variables other than the presence or absence of children, which are correlated with divorce and which in turn have their own chain of causes.

If, in trying to find a cause, we stop at the nearest cause (the last link in the chain of causes), we may miss a basic or fundamental cause, such as an economic or a technological one.



10 Causes of Divorce Are Many and Sequential

Many questions to be answered scientifically must be reformulated. We often express our curiosity rather vaguely and inadequately. For instance, we may be curious to know whether the family influence is declining in society. But what do we mean by family influence? We may mean the influence of the parents upon children, or of parents and some children on a child. Or we may want to know about the influence of the family on some other member, say the wife and the mother. She may be spending more time outside the home. Or we may be curious about the declining influence of the family as an institution on public opinion, or on education or on the protection of dependents.

Good scientific thinking requires not only that we write and speak definitely, but also that we ask our question in such form that it can be answered scientifically. This is not true of the question, "Is family influence declining?" Family is not defined, nor is influence. Nor do we know to what period or country the question applies. The question is therefore too general, too comprehensive. The first step is to break it down into a series of questions dealing with the kinds of family, say urban or rural, with different types of influence, etc.

The formulation of the questions should be in measurable terms, that is, terms into which data may be fitted. Thus the following question is in such form that it can be answered if data are available: has the control of the parents in Chicago over the behavior of their children been less effective during and since World War II than in the 1930's as shown by the opinions and/or reports of school officials in selected districts?

It is very good practice in sociology to examine a question to see whether the statement of the question is in such concrete and specific form as to lend itself to measurement. Many questions and statements need such careful analysis.

Scientific Writing

A word is a collection of sounds or visible markings. But the word refers to something. For instance, ink shaped into the letters d-o-g refers to an animal, with four legs and a tail, that barks. The word *democracy* refers to a set of beliefs or actions concerning government by the people as a whole, rather than by a minority without the consent of the people. We therefore have two concepts, words and their referents.[13]

In scientific sociology the referent should be clear to the sociologist, and he should also make sure that he and his listener or reader have the same referent in mind when a word is used.

Individuals may differ widely in the referents they have for the same word. In general these differences are much greater for abstract nouns than for concrete ones. A dog to some may be a hunting dog; to another a pet lap dog. But no one will think the referent for *dog* is any other animal. The referents to communism, however, vary widely. To some communism is any set of radical beliefs to the left of an extreme conservative position. To others, communism is the belief that the means of production should be run by a government which in turn is run by the people, a majority of whom are wage or salaried workers. Some see in communism chiefly a dictatorship by working class leaders. To some the essentials of communism lie in the ruthless method of taking productive property away from others by force and without due compensation, and turning it over to the dictatorship of a clique. And so on.

Some of the differences among the referents held by various people are due to confusing the phenomenon under consideration with other phenomena with which it is cor-

[13] C. K. Ogden and I. A. Richards, *The Meaning of Meaning* (Rev. ed.; New York: Harcourt, Brace & Co., Inc., 1936).

A teacher to his pupils . . .

From Brahma to a blade of grass, all is an aspect of Becoming. Brahm, not Brahma, is the only Truly Existent One, and it is profitless to discuss Him. Everything but the Original Cause [can be discussed]. If you study the Science of Sciences for a few years you will understand why. The laws of mental involution are no different from other laws; you cannot see the Mysteries with unquickened sight. You must not shut your eyes to the world, but rather develop the wings you have in order to flutter to the Most High. . . . The Clear Light of Reality may be seen by the mind, by the heart and by the physical senses; but the mind and the heart and the body are never really apart. There is nothing but the Self. The body is an ant heap of activities, living out their lives in its sun. To the lives within you, you are God, and these lives are God to principalities and powers invisible. They are in you and you are in them, for without them you could not live, as our God could not live without us. . . . Beyond thinking and imagination there are subtler bodies that remain forever outside our mortal sense. Our Vedas said that before your microscopes and telescopes. No one will ever see the world as it really is, even the greatest guru [teacher]. Samadhi is but a rending of one veil, when there are seven. It is an illusion, like everything else; like your mathematics, which will one day prove to you that two and two do not make four. Such beliefs are useful illusions, necessary props. But Sarvam Khalvidan Brahman; outside Him not even solipsists exist.

— Francis Yeats-Brown, *The Lives of a Bengal Lancer*

11 Non-Scientific Writing

The preceding teachings of the guru to his pupils are not in the language of science. Scientific writing is characterized by two criteria. The first is clarity and precision of concepts. The guru does not define "Becoming," "mental involution," "heart," "principalities invisible," "powers," "seven veils," and the "Most High." The second criterion is the presentation of evidence, or the answer to the question "How do you know it?" in support of definite conclusions. How does the guru know that "there are seven" veils? What is the evidence that "these lives are God to principalities and powers invisible"? There are in the preceding passage twenty-three definite statements that are not obvious and for which no proof is given or indicated. (Quotation from Francis Yeats-Brown, *The Lives of a Bengal Lancer*, New York, The Viking Press, pp. 96–97, with the publisher's permission.)

related. Thus democracy is defined in the dictionary as "government by the people, the principle that all citizens have equal political rights." There are those to whom the referent for democracy is a classless society. To the Russians it is said to be a society of economic equality. If we take as correct the referent quoted in the dictionary, then we often find a government by the people correlated with a reduction of social classes and a weakening of class barriers. Let us call a government by the people, X, and a classless society, Y. Because we find X correlated with Y, we are not warranted in saying that X and Y are the same things. The business cycle is correlated with the marriage rate, but we do not make the mistake of calling the business cycle the marriage rate.

Here is an exposition of the referent *democracy* presented by one writer:

> Democracy is the line that forms on the right. It is the 'don't' in 'don't shove.' It is the hole in the shirt through which the sawdust trickles. It is the dent in the high hat. It is the feeling of privacy in the voting booth, the feeling of communion in the libraries, the feeling of vitality everywhere. . . .

These may be the things with which democracy is correlated, but they are not democracy. Referents should not include all the free associations which go with the word to which a referent is sought. Referents often are varied and confusing when an attempt is made to describe the spirit of something as the writer on democracy attempts to describe the spirit of democracy.

Referents are often ideals, what we would like them to be rather than what they are. Thus the conceptions of democracy as a classless society or as a society where economic rewards or opportunities are equal are idealizations that do not exist, for there are no large literate societies where incomes are equal or classes are lacking. The referent we carry around in our heads should be recognized for what it is.

SOCIOLOGY AS A SCIENCE

The question is sometimes asked, Is Sociology a Science? — usually by a haughty natural scientist in a tone of voice that suggests the answer should be in the negative. (This statement is objective reporting, not the expression of emotional bias.) Though a natural scientist, full of pomp and pride, may like to look down his nose at a lesser science, the question deserves serious consideration.

First, a correct answer can not be dichotomized into the two categories, yes or no. Rather the answer should be in terms of degree, the degree to which sociology is a science.

A science is to be judged by three criteria: the reliability of its body of knowledge, its organization, and its method.

Reliable knowledge. As to its body of reliable knowledge, sociology for a young science has made a very good beginning in such fields as race relations, population, criminology, the family, group behavior, the evolution of institutions, the processes of social change, and in various other areas as shown by the materials that follow in this book.

This knowledge is as enduring as the rock of Gibraltar for it will be as true centuries hence as now. Such, for example, is the knowledge that families in cities have a lower birth rate than farm families in the open country, or that divorces occur more frequently in families without children than in families with them, or that more couples marry in times of prosperity than in depressions. Conditions may change in the future (there may be no cities), but this knowledge, applicable to the western world in modern times, will not have changed.

Much knowledge in sociology is restricted as to time and place, and hence is unlike many of the generalizations of physics, as, for instance, the law of the expansion of gasses. There are many more variables in

sociological data. Still, sociologists seek generalizations that are universal, and they have had some success, as, for instance, in finding that societies always regulate marriage in such a manner as to prevent incest, though incest may be variously defined.

A very good test of the reliability of knowledge is the test of prediction. While prediction in sociology is liable to error, in many cases the error is small, as in the prediction of the size of future populations, or the prediction of the violation of parole, or the prediction of some social effects of invention, or the prediction of the social effects of the business cycle.

In some areas of sociological study reliable knowledge is quite difficult to obtain. These may be areas where measurement is rare, or where observation depends upon feeling tones, rather than upon the objective recordings through the eyes. Thus symbols, like those used by the psychiatrist in analyzing dreams, are rather treacherous material. Of course other areas such as religion and art are not very amenable to scientific method.

Many publications classified under the title of sociology consist only of ideas, not knowledge. These are essays, ethical discussions, wise pronouncements, interpretations, theories, programs, valuations, etc. Brilliant, profound, stimulating, and highly intellectual they sometimes are, but they are not science. Their importance, of course, may be even greater than that of science.

Though the researches of sociologists may yield reliable knowledge, that knowledge is not always used. Thus broken homes, crowded city streets, unhappy parents, and poverty increase juvenile delinquencies. But to control juvenile delinquency by eliminating divorces, unhappiness, poverty, and cities is a difficult undertaking.

The pile of trustworthy sociological knowledge should be greater for the reader's children and grandchildren than it is now for the reader.

The organization of knowledge. A miscellaneous collection of facts such as is found in *The World Almanac* is not science. But the classification of the elements in chemistry into organic and inorganic compounds is a science. The value of organization lies not in a symmetry or pattern whose appeal is largely aesthetic, but in its value for the discovery of more knowledge.

The organization of a science rests upon the relationships which the parts of knowledge bear to each other. In sociology there are many interrelationships, enough to afford many leads and tools for more discoveries, but not yet enough to yield a very adequate synthesis for the whole field. A larger collection of knowledge, it is expected, will eventually provide such a synthesis.

There has been much effort spent on organization in sociology, but it has been an organization of ideas (and sometimes only of words) rather than of knowledge. Some of these organizations make very beautiful systems (one is built on a classification of fours throughout). These systematizers think they are setting up guides which the younger scientists, those who follow them, will use. But often these systems are futile, as was the organization of medicine around the theory of convulsive action advanced by Benjamin Rush, a century ago.[14]

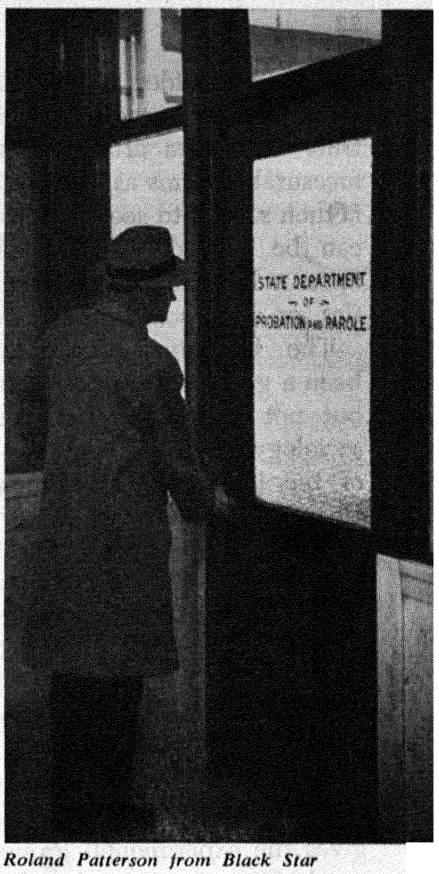
Method. Primitive peoples had a body of knowledge about weapons, tools, traps, clothing, and housing that was reliable. Those who do not call this knowledge science, assert that the primitive peoples did not have the scientific method which we associate with the beginnings of science under Bacon, Copernicus, and Galileo. What is this method?

Primitive man is supposed to have discovered and learned things, more or less accidentally, by trial and error. Scientific method is less wasteful and quicker. It be-

[14] S. A. Stouffer *et al.*, *The American Soldier*, Vol. I (Princeton, N.J.: Princeton University Press, 1949), p. 32.



Wide World Photos



Roland Patterson from Black Star



L. A. Reens from Black Star

Stimson Hubbard of FPG



12 Forecasting in the Science of Sociology

Though sociology may not predict precisely, it can forecast with a high degree of probability, as, for instance, when and where a riot may occur, the chances that parolees will not return to prison, the likelihood of happiness in marriage, and the outcome of elections.

gins with an idea that is thought to have more than fifty per cent probability of being true. This idea after analysis is stated in measurable terms as a hypothesis. Evidence is then sought to see whether the hypothesis can be proved. Verification may depend upon a laboratory experiment, upon statistics, or upon some other evidence.

The laboratory experiment which has been a great aid to many natural sciences — but not to all — is not very common in sociology. But sociology has the equivalent of the laboratory experiment, as becomes clear if we inquire what is the essence of a laboratory experiment. Surely not a room with gadgets. The laboratory experiment is generally a device to measure the relationship of two variables while other factors are eliminated or held constant. Thus an experimenter gets an idea that food may prolong life. He decides that a good bet is Vitamin A. So he divides at random 100 rats of common stock into two groups of 50 each and gives the experimental group four times as much Vitamin A as he does the control group. But in the laboratory all other factors of food, temperature, and light are the same, that is, are held constant. The result is that old age and death are postponed by 15 per cent of the normal life span by the greater consumption of Vitamin A. The variables of longevity and Vitamin A are related, when other variables are held constant.

In sociology we do essentially the same thing, not in a laboratory, but with statistics. For instance, if we want to know whether families with low incomes have more infant deaths, we do not get 50 rich mothers and 50 poor mothers and put them in a room and watch the babies die. Instead we collect statistics. But first we must hold constant the type of feeding — by breast or bottle — the customs associated with ethnic groups, and finally the race. By studying and varying the factor of income and infant deaths, and by keeping other factors constant, it is shown that by increasing income alone we can save the lives of babies.

Sociology has quite adequate methods. The difficulty lies in getting the data, for the process is very costly. One United States Census alone, that of 1950, cost $90,000,000.

The youth of sociology as a science shows itself in the amount of approximate instead of precise knowledge. Thus there is a good deal of approximate information on family relationships and the personality of children. Much sociological work consists in making knowledge more precise and thus adding to the growing stockpile already in existence.

SUMMARY

The problem of the scope of sociology is not as significant as the problem of the method. It is not as important to know the difference in scope between sociology and the other social sciences as it is to know the difference between a scientific sociological study and a literary essay or poem, although in the next chapter the relation of sociology to the other social sciences is considered. Hence it is desirable to know how to appraise sociological work and writing from the point of view of science. The authors have presented from their experience a few observations that seem to them especially worth while for the student. These concern the problems of description, the idea of variability, the nature of causes, the measure of relationships, the reason why analysis is important, and the significance of concepts. With this introductory information on method, the student should be better equipped to read the text which follows, to appraise other works in sociology to which his teacher refers him as collateral reading, and to do sociological work on his own account.

QUESTIONS FOR DISCUSSION

1. Should a college teacher always be scientific in the classroom?
2. How is science helping to solve the race question?
3. Can science be applied to values?
4. Why are scientists not good promoters?
5. What is the difference between pure science and applied science?
6. To what extent is quantification an essential of science?
7. Discuss Lord Kelvin's famous statement: "When you cannot measure what you are speaking about, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind."
8. How does a "cause" differ from a "correlation"?
9. What do we mean when we say, "A constant factor can never be a cause of a change"?
10. What is the problem of the relation of semantics to science?

TOPICS FOR REPORTS

1. A comparative study of concepts of causation.
2. The growth of organizations for social science research.
3. Modern trends in methods of sociological research.
4. A report on the non-scientific types of writing in the morning newspaper.
5. A critique of Hornell Hart's scale for measuring the scientific quality of sociological writing. (See: "Measuring Degrees of Verification in Sociological Writings," *American Sociological Review*, 12: 103–113, February 1947; "Verifiability Ratings of Articles in Social Science," *American Journal of Sociology*, 53: 119–124, September 1947.)
6. Select an important social issue today and report on how science could help to solve it.

SELECTED READINGS

CHASE, STUART, *The Proper Study of Mankind*, revised edition. New York: Harper & Brothers, 1956.
A fairly good up-to-date popular account of the problems and achievements of the social sciences.

EVANS, BERGEN, *The Natural History of Nonsense*. New York: Alfred A. Knopf, Inc., 1946.
An entertaining and devastating account of false beliefs that are widely held.

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For young people this book adds to the usual exposition of logic the contributions and the role of science. A simple, clear analysis of fundamentals.

LEIGHTON, ALEXANDER H., *Human Relations in a Changing World*. New York: E. P. Dutton & Co., Inc., 1949.
Subtitle: *Observations on the Use of the Social Sciences*. General conclusions based on the application of principles and methods of social science to the wartime analysis of Japanese morale.

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Proposals for making the social sciences more scientific.

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Concerned with consolidating social theory and research, and with codifying theory and method.

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An excellent brief account of semantics.

PEARSON, KARL, *The Grammar of Science.* London: Walter Scott, 1892.

A classic.

POINCARÉ, HENRI, *The Foundation of Science.* Lancaster, Pa.: The Science Press, 1914.

An extraordinarily clear presentation of the concepts of science. Frequently cited in discussions of science.

WALLIS, W. ALLEN, and HARRY V. ROBERTS, *Statistics: A New Approach.* Glencoe, Ill.: The Free Press, 1956.

Gives an introductory view of the quantitative aspects of scientific method. The content is rich with illustrations showing types of fallacious reasoning and observation, valid and invalid conclusions, uses and abuses of statistics, inappropriate comparisons, methods of selection, construction of tables and questionnaires, size and representativeness of samples, misleading charts, and so forth. The book was written for readers without mathematical background.

2

The Map of Sociology

If you were to visit a large city that you had never seen before — Paris, for instance — you would be helped a great deal by examining a map of the city. You would see that the city is circular and that the river Seine running from east to west divides the city into two parts: the south bank, where the university, the bohemian quarter, the art centers, and the government buildings are located; and the north bank with its smart shops, night clubs, opera house, and theaters. The map would help you tell distances and locate streets and numbers and show the routes of the busses and the subway. But it would give you no idea of the majesty of the Notre Dame Cathedral or the charm of the Tuileries or the beauty of the Champs Élysées. After all, it is only a map, and the sights and thrills of this city of cities are not to be expected from it.

You are about to visit the territory of sociology which you have never seen before. You need a map to find your way about. True, sociology is not Paris, though there is a lot of material for sociology to be found in that city. Yet an outline can be very useful in pointing out directions and giving some ideas of locations in sociology. It will tell you something of what to expect. For your guidance we propose to draw such a chart and present it in this chapter. But it will be only a map, and not too much is to be expected from it by way of illustrations and detail. These will be found in later chapters. As a map it needs to be looked at closely, and like a map you may wish to consult it from time to time later on.

As a student you have taken courses in history, in English composition, in mathematics, and hence you know what these subjects are like. Now you are about to take up a new subject, sociology, and naturally you want to know what it is like. We propose to tell you in this chapter. Our definition of sociology will be rather more full than the usual definition, but we hope in not such detail that you cannot see the woods for the trees.

OUTLINE AND RELATIONS

Sociology is the scientific study of social life. Nearly all sociologists study the social life of human beings, but there is an animal sociology, which deals with the social life of lower animals such as chimpanzees or insects such as bees, whose social activity has a truly remarkable organization.

This definition is brief. We want to know what social life is. Common to the various types of social life are the interactions of individuals. But when such interaction occurs between two or more persons, it often occurs more than just once. Over a period of time, it may be repeated millions of times. Thus we use the same salute in greeting each other. Parents follow a fairly uniform pattern in teaching their children to walk. Women prepare food after men bring it home or supply the wherewithal to buy it.

These repetitions become manners or etiquette, social institutions such as the family, or communities based on division of labor, all of which we call social organization. So sociology by studying social life comes to study social organization.

Each new crop of babies does not have to create these interactions anew. Rather these different ways of interacting are in existence, in practice, when babies are born, and they learn manners and institutional ways of doing things, instead of creating them. So tradition, or as it is frequently called, culture, becomes very important for the social life of any group.

People usually act through social organization not just for the fun of it, but for some serious purpose such as getting food or clothing. But whatever the objective, through social organization they create a variety of things such as music, words, morals, buildings, vehicles, tools, wealth. The study of these special products (the ways of producing and of using them) is the subject matter of special disciplines such as education, religion, economics, technology. But sociologists do not consider them as outside their field, since they are results of social life and condition ways of social living. Thus the steam engine was produced first to pump water out of the tin mines of Cornwall, but later on social life was revolutionized when the steam engine was used in factories and on railroads.

One of the products which comes from social interaction is a set of habits formed by the very young. Some teachers are hard disciplinarians and the young become rebellious. Some children must struggle for recognition and become aggressive. So different social interactions produce different personalities.

Sociology, then, in studying social life, studies interactions, not just as psychological behavior but as social organization. Social organization is the heritage of the newly born and creates products, one of which is the personality of the young.

GENERAL SCIENCES	SPECIAL SCIENCES
Sociology	Economics
History	Political Science
Anthropology	Education
Psychology	Law

13 General Sciences and Special Sciences

How sociology differs from other social sciences such as economics. From this discussion you will think that sociology is a very broad subject. If you read the preceding paragraphs carefully you will note that one of the products of interaction that sociologists study is wealth. Then, if you remember the courses in the college catalogue, you may say that you thought the study of the production of wealth was called economics and that you thought sociology was something different.

You are quite right. Though sociology and economics both study industry, they do so differently.

Economists study economic institutions such as factories, banks, trade, and transportation exclusively and are not concerned with the church, the family, or the courts. They probe quite thoroughly in this field. In a course in economics you may hear discussed the effect of the bank rate of interest on factory production, about which you would not hear in a course in sociology.

Social life is so complex in modern times that division of labor is needed to study it. So we have economics, concerned with economic institutions; political science, specializing in government; education, studying the schools; and the law, devoted to the courts and legislation.

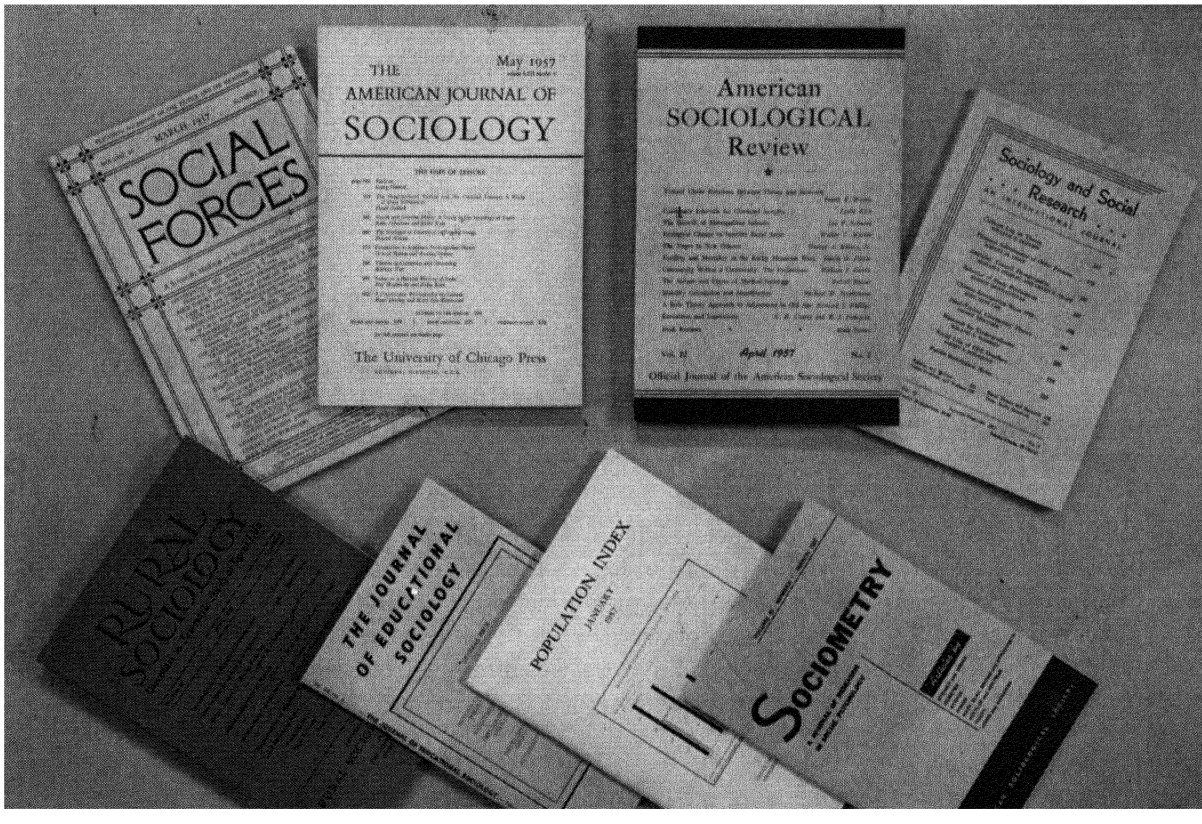
On the map of sociology there are several special developments. We have

seen that the main task of sociologists is to develop knowledge which will explain society and social behavior. They have certain fields which they cultivate as assiduously as the economists do the economic field or the political scientists the political field or the educationalists the field of education. Some of these sociological fields are major. One is the family. Another is population, where some of the specialists are called demographers. The community is also the province of sociology. These special areas have been taken over by sociologists mainly because of their general sociological importance. For instance, the family as a social institution is the most important factor in transmitting culture to the very young and also in teaching children the ways of social life. Second in this respect is the community, which has throughout history and prehistory been the general locale of human social life. The sociologist studies population because the individual is the unit in the group and the size and density of populations are most important bases for the number and variety of social organizations.

Other parts of the map of sociology where sociologists are active are such social problems as crime, poverty, race relations. While these problems are all concerned with the basic factors of social life, the emphasis in dealing with them is strongly on action to ameliorate or eradicate them. In this endeavor, sociologists are joined by workers with varied training in other sub-

14 Sociological Journals

Shown are four general sociological journals and four that represent special fields. There are others published in the United States, as well as a number in foreign countries.



jects such as social work and law and public administration. Hence these particular areas are dealt with generally in courses in social problems rather than in courses dealing with the principles of sociology.

Students who use this book will, of course, realize that in a first course no particular area on this map can be dealt with extensively. The presentation here is an introduction. Hence in sociology departments other courses may be offered which deal more thoroughly with, say, the family, population, or communities.

Though there are specialized social sciences, there are also studies which are general and broad in scope. Such, for instance, is history, which includes economic topics like trade, political-science subjects like elections, and many other social matters like wars and religious activities.

Sociology is a general science like history and anthropology. So there are general subjects as well as specialized ones. Sociology is a general subject and studies many widely different social institutions. The concern of sociology with economic institutions, which is in particular the province of economists, may be with the social aspects of economic activities — for instance, the effect of factory production on cities, or the effect of business prosperity upon the number of marriages. Sociology is therefore particularly interested in the relationship of economic activities to other social institutions.

As a general science, sociology is also especially fitted to deal with characteristics that are common to all groups, all societies. Thus, in sociology there has been much study of social classes, of social prestige, of rank, and discrimination and power. These phenomena are found widely distributed: there are social classes, for example, in a factory, in schools, in churches, in government, and in the army. Hence, social status can be better studied by the general science of sociology than by economics alone or by education, theology, political science, or military science.

There is another general science that is somewhat like sociology. It is anthropology, which deals with widely distributed phenomena such as customs, and also treats several different institutions, such as religion, the family, the clan, and tribe. But usually anthropologists have restricted themselves to the study of primitive preliterate peoples, such as the Eskimo or the Bantus. More recently anthropology courses have dealt somewhat with modern community phenomena, but they have largely been comparative studies of small societies, such as villages.

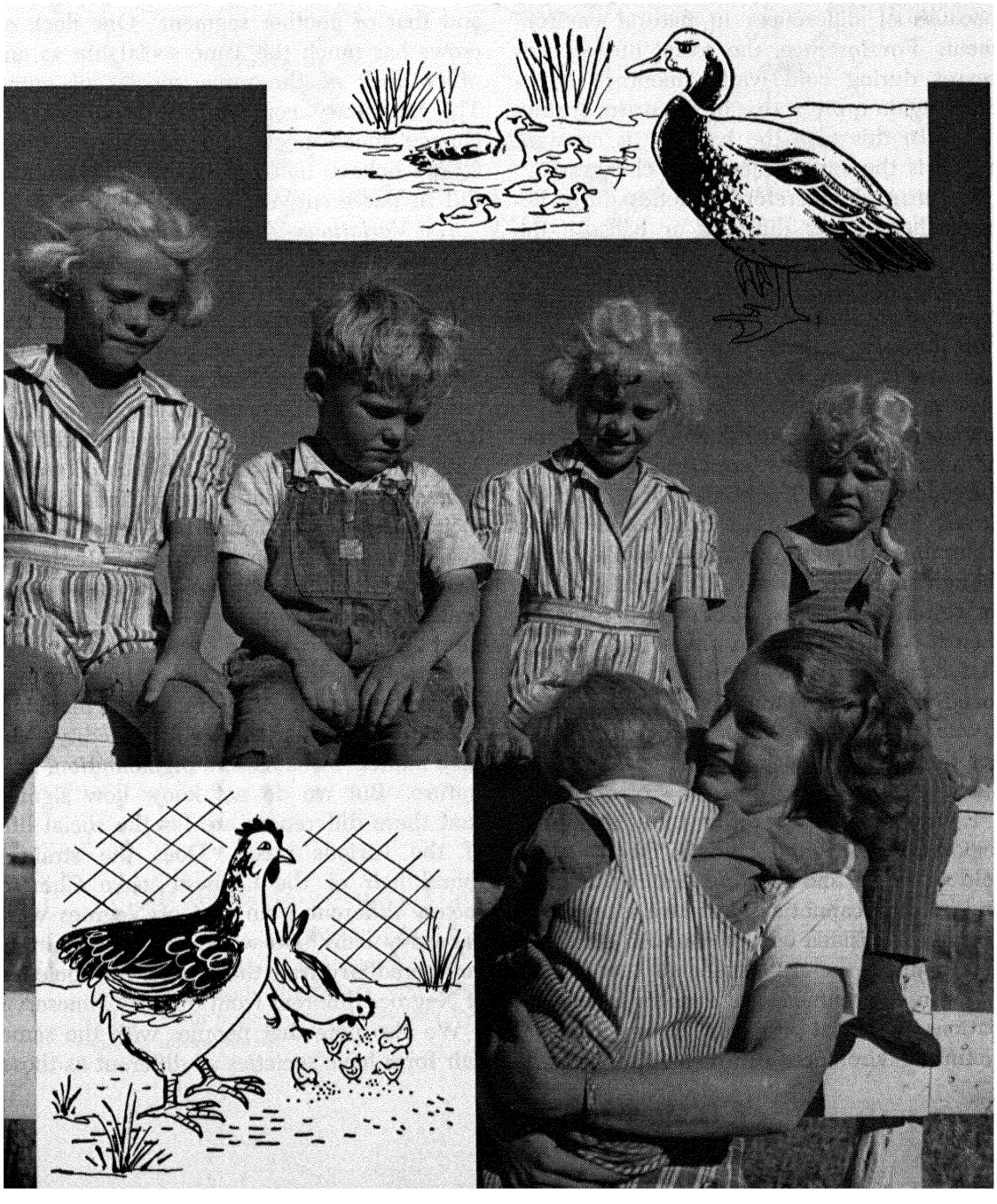
History, the other general study, differs from sociology in that it is concerned with describing unique events, such as the battle of Okinawa, or unique movements, such as the industrialization of England. Sociology does not deal so much with unique happenings. Proper names like Eisenhower and Churchill do not turn up very often in sociology books. Also only a limited portion of sociological works is given over to description. In sociology the object is not so much to describe as to search for causes and explanations. A very common question in sociology is, why?

FACTORS THAT SHAPE OUR SOCIAL LIFE

So we want to know why we behave like social beings. We have begun our definition of sociology by saying it is the study of social life, of group interaction, of social behavior. Our next step is to explain why social life in one place is different from another, why social interaction in Japan, for instance, is different from that in Europe, and why the social behavior of New Yorkers is different from that of the Navaho (when it is different).

15 Heredity

Heredity is the factor that determines that the social life of man is different from that of any other animal. Though the hen's egg and the duck's egg are quite similar, the behavior of the duck and of the chicken are quite different. But humans all belong to one species, and hence the variation in their behavior insofar as it is shaped by heredity would be little for normal human beings. The wide variations that are actually found in societies in various parts of the world are due to other factors than heredity. The influence of heredity is to draw limits and to set up most biological modes of behavior. (Photograph by Henle from Monkmeyer.)



The factors of biological heredity and natural environment. The next step in the extension of the concept of sociology is the explanation of social behavior in terms of heredity and environment. The social behavior of chickens and of cats is quite different, even when they have the same environment. Hence their different social interactions are due to differences in heredity.

But the activities of societies differ also because of differences in natural environment. For instance, the social life of bees ceases during cold winter months, to become again quite active in the warm springtime. In this case the heredity is constant and it is the environment that changes.

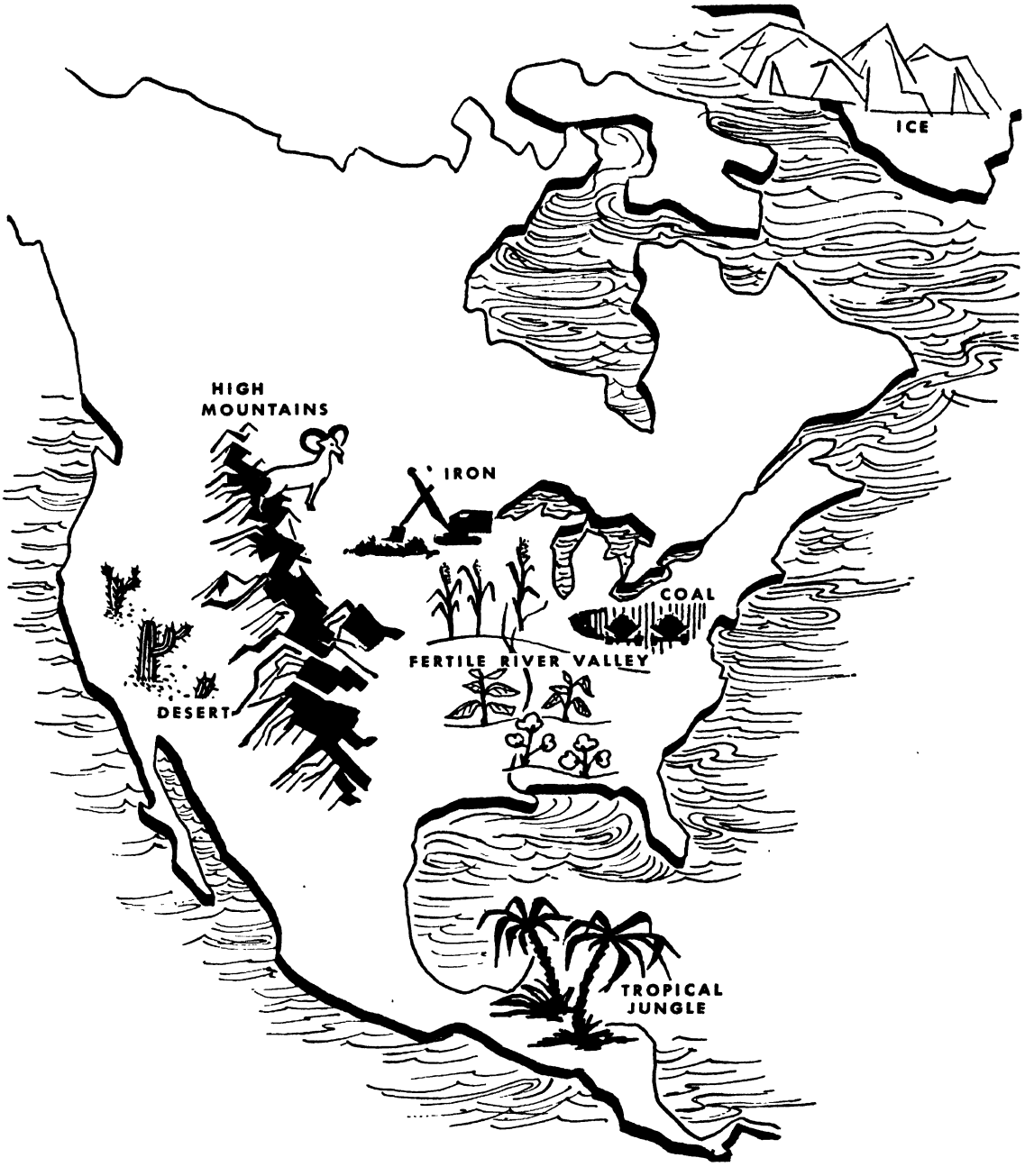
In principle therefore societies differ because heredity is different or because the physical environment changes. In reality, however, there are limits to the change in environment and also to hereditary changes. For instance, among the lower anmials if the environment changes very much death results or the animals do not do well, as managers of zoos well know. There must be an adjustment between the animal and the environment. The climate of the United States has not changed appreciably since Columbus brought white people over, though some years are hotter, colder, drier, or wetter than others. If climate is constant, then it is not a factor in any social changes that have occurred. The differences in the social life of Manhattan Island at the time it was bought from the Indians and now are not due to changes in the natural environment.

Environment does differ from region to region. Thus around Hudson Bay it is too cold to farm; and hunting, mining, fishing, and herding cannot support a dense population. In Louisiana occupations are different, and populations are dense; so that differences in environment are a factor in the variations in social life in the two regions. Natural environment can be a factor in variations in social life in different regions, and in different seasons in the same region.

The other cause of societal variation, namely, variations in heredity, is in reality, more noticeable between species than in a single species. Thus the social life of crows is different from the social life of sparrows in the same environment. But within a species there is not much difference between the heredity of one segment of a population and that of another segment. One flock of crows has much the same social life as another flock of the same species of crow. The hereditary contribution also does not change much over long periods of time. Crows behave much the same now as they did in our great-grandfathers' day.

Variations in natural environment and heredity do not contribute as much to the explanation of differences in man's social life as do variations in the cultural environment. In sociology, we are more interested in human beings than we are in crows. Can differences in human societies be explained by differences in heredity? This is one of the great problems of sociology, one of the unfinished sections on the sociological map. There has been a good deal of work done on it, however. It should be noted first that human beings whether broad-headed or narrow-headed, tall or short, like the common crows are only one species. The different races of men are not different species. The races of mankind certainly differ — because of heredity — in such matters as hair form, pigmentation, and stature. But we do not know how significant these differences are for the social life of the various races. Does the straight round hair of the Chinese make Chinese society different from that of Negroes with flat wavy hair? Do we know for certain of any hereditary trait that makes the societies of Negroes different from that of Chinese?

We also note that peoples with the same hair form have societies as different as those



16 Natural Environment

Few societies can exist on high rocky mountains or in glaciers or in deserts; so geography determines boundaries of human societies. The fertile river valleys in warm climates were favorable to early civilizations, and now iron and coal in proximity are propitious. But social life has a good deal of similarity throughout the United States despite the variety of natural environments.

between the Negroes and Chinese. Communities of the same race may be greatly different. For instance, in some remote spots of Europe and on isolated islands off the European Coast, the social life suggests that of a primitive people, vastly different from the social life of great cities such as London, Stockholm, and Edinburgh, peopled by the same race.

It seems probable that the hereditary capacities for social life of one large segment of the human species does not differ very much from that of another large segment. Hence variations in human societies are not likely to be explained satisfactorily by variations in heredity. Human sociology is different from animal sociology. Differences in the social interactions of various species of lower animals are almost wholly due to differences in heredity. The variations are due to heredity but the social life itself is due both to heredity and to environment; that is, to the integration or adjustment of the two. No society is a product of heredity alone, for animals must live in an environment. No society is a product of environment alone, though an aggregation of pebbles is.

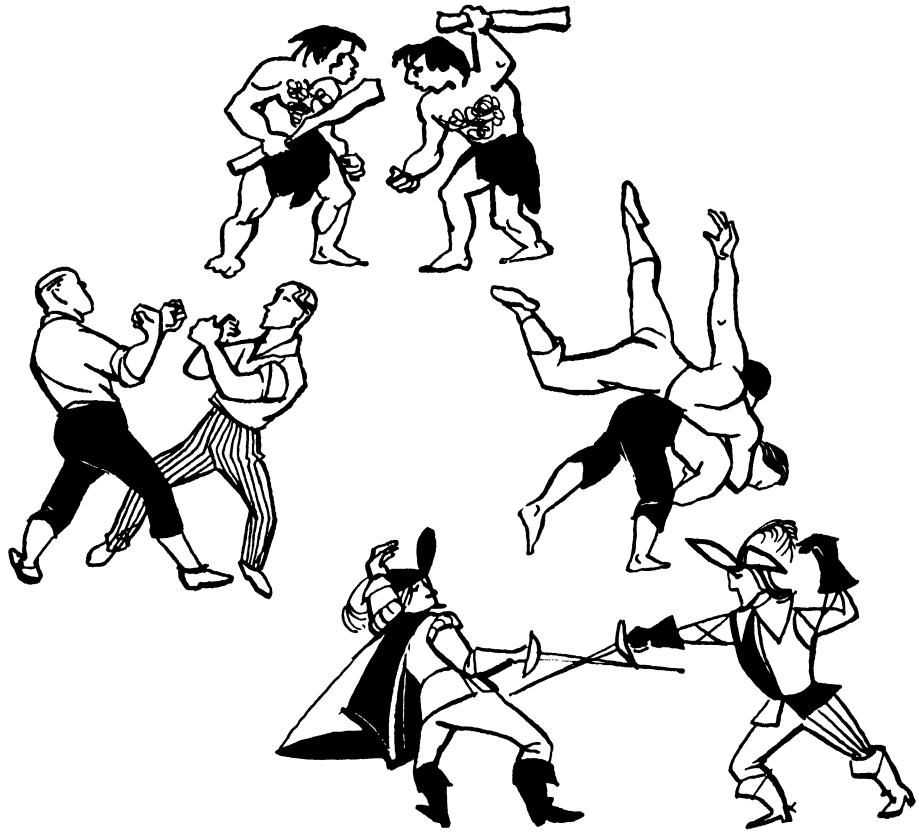
One other distinction between heredity and environment may be observed. The contribution of heredity to society among the higher animals including men is passed on from parents to offspring through the mechanism of the genes carried in the egg of the female and in the sperm of the male. The contribution of the natural environment to society is passed on, that is, is continuous, through processes outside the genes of the individual members of that society.

The concept of culture. We now take another step in our pursuit of a conception of sociology. This we do by examining further the nature of environment, that which surrounds us, that into which we are born. Environment consists of a lot of things. One class of these we call nature, and is symbolized by earth and air, sun and rain, flora and fauna. But the environment of human beings is more than this environment of nature. As an illustration we note that the natural environment of the Indians in early Massachusetts was the same as that of the Puritans who settled among them. But the children of the Puritans were brought up in a different environment from that of the Indian children. The language was different, as was the religion, the agriculture, the housing, the family, the marriages, the law, the schooling.

This type of environment needs a name. Herbert Spencer called it the superorganic in contrast to the natural environment of inorganic and organic materials. It is a very impressive term, for it suggests the birth of cosmic orders. For when the earth was young, there was only inorganic matter. After incalculable time the organic was born and evolved into man; and eventually there appeared the superorganic which after a slow start has gained momentum, fashioning a fabulous civilization. We feel a certain awe in contemplating the superorganic as we do when we look at the Milky Way on bright moonless nights and contemplate these galaxies millions of light-years away.

The term "superorganic," however, has not come into general use. Instead we use the word *culture,* a translation of the German *Kultur,* which has about the same meaning as the superorganic, and hence is quite different from the "culture" a young lady expects to get when she studies the arts and music. The word culture is a word like science or democracy whose definition gives a meager conception of its meaning. One may think about culture for a lifetime and still find something new in it.

The concept, culture, has great explanatory value in accounting for various social phenomena, because of its great variability. It varies over short periods of time and is thus unlike human heredity and unlike the natural environment. If Thomas



17 Culture

To some people, jiujitsu seems the "natural" way of fighting; to others it is more "natural" to fight with clubs, or swords, or bare fists. But this "naturalness" is not biologically given. Heredity endows us with fighting capacities, but it does not dictate that we fight with bows and arrows or with atom bombs. How we fight is learned — or even whether we fight or not. It is from our culture that we learn particular ways of fighting.

Jefferson could visit the United States today, he would find a greatly different culture from the one he knew when he was president. We might want to get Jefferson's opinion on the United Nations, or the atom bomb, since Jefferson was both a diplomat and a scientist. But Jefferson would not know what the terms meant. If the conversation turned to the radar network, or the vaccine for polio, or the influence of the radio and television on elections, Jefferson would have to call for much explanation and many of the terms would be strange to him. So culture changes. It is vastly different in Egypt today from what it was in the time of the Pharaohs and still more from that of the Egyptians in the faraway stone ages.

Culture also varies from region to region at the same time and with the same race. It is different in a village in India among peasants with bullock carts, wooden plows and cow dung used for fuel, from what it is in nearby Bombay with electricity, universities, libraries, radios, apartment houses, and paved streets. Hence culture is a potential explanation of why social life differs from one place to another.

Though we note that culture is highly variable from place to place and from time to time, we need first of all to observe that

Accelerator	Converter	Ionization chamber	Positron
Activation	Core	Isotope	Proton
Alpha particle	Cosmotron	Kev	Q-value
Atom	Counter	Kilocurie	Rabbit
Atomic energy	Critical mass	Linear accelerator	Radiation
Atomic number	Curie	Master slave manipulators	Radiochemistry
Atomic theory	Cutie-pie	Meson	Radioisotope
Atomic weight	Cyclotron	Mev	Radium
Atom smasher	Decay	Milliroentgen	Reactor
Autoradiography	Deuterium	Moderator	Roentgen
Background	Deuteron	Molecule	Scintillation counter
Beta particle	Dosimeter	Monitor	Shield
Betatron	Electron	Neutron	Slug
Bev	Electron volt	Nuclear bombardment	Source
Bevatron	Element	Nuclear energy	Synchotron
Binding energy	Film badge	Nuclear reaction	Thermonuclear reaction
Bombardment	Fission	Nucleonics	Thorium
Breeder	Fissionable	Nucleus	Tracer
Cerenkov radiation	Fusion	Pair production	Tritium
Chain reaction	Gamma rays	Photoelectric effect	Unstable
Charge	Geiger counter	Photon	Uranium
Cloud chamber	Half-life	Pig	Van de Graaff accelerator
Cobalt-60	Heavy hydrogen	Pile	X-Ray
Coffin	Heavy water	Pitchblende	"Z"
Compton effect	Hot	Plutonium	
Control rod	Ion		

18 101 Atomic Terms

George Washington, our first president, lived nearly 3,000 years after Solomon, King of Israel. Yet like Solomon he wore hand-loomed clothes, used animal oil for light and wood for fuel, and rode in vehicles drawn by horses. Washington lived only about 160 years ago.

Culture, unlike human heredity and natural environment, now varies greatly over short periods of time, with great consequences for social life. The recent spectacular developments in atomic energy are reflected in a large new vocabulary. (Reprinted from Esso Research and Engineering Company's booklet, *101 Atomic Terms and What They Mean.*)

culture is an accumulation which a new generation inherits. It is a heritage into which a child is born, as he is born into a natural environment. A Turk is different from an Egyptian because he is born into the Turkish culture and not the Egyptian. The way a child acts and interacts is not determined by instinct as is the case of a wasp. A child does not create anew his ways of acting. He learns them. The rules and procedures are there when he is born, and they tell him how to act. These ways of acting are customs, laws, folkways, moral codes, language, institutions. And part of this heritage consists of objects which man makes or uses or to which he reacts, such as factories and transportation systems. These, too, help to shape his social life. Culture has been accumulating — and changing — for a very long time. It goes back to the ice ages and beyond. So culture helps to explain the social life of human beings at any place or time.

There is still another factor that helps to explain the social life of men. It is the group. And here we invite you to take another look at the sociological map we are showing you.

Groups transmit and change culture, but the forms of group life, within limits, are set by culture. The first concept of the group to be impressed with is that it is a medium through which we learn culture, use culture, and change culture. The family is the group which starts us on our way to learning culture, and the school is another group which helps us to acquire it, as does the neighborhood. We use culture through innumerable groups.

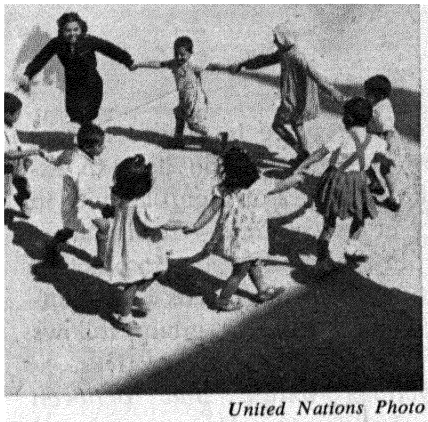
Though culture and the group are two factors in the social life of men, they are not two separate parts as stone and wood are separate parts of a building. They are more intricately integrated, more like a chemical mixture than a mechanical mixture. For instance, though the group is the medium through which we acquire and use culture, the group can only do this in the way culture directs it to do. Thus through language, a cultural product, the family group teaches the child morals, another cultural product. But the family is not a group outside culture. The way the family group functions is a part of culture. It is culture that enables the family to teach a child culture. Though the human group is composed of biological entities, they are not entities without a culture, as are insects. The human groups are biological entities functioning culturally as well as biologically.

From the discussion in the foregoing paragraph, group interaction appears to be a part of culture. And so it is. But group interaction is also limited by biological capacities. For the learned group activities of the cats could never attain the extent of the group life of cloven-footed animals. If human beings were descended from the cats, their group activity would be different from what it is. Also group interaction takes directions pointed by biological needs such as obtaining food and mating, for example. But these biological determinants of group activity do not help in explaining changes in social life from place to place or from time to time, though they do help to explain the different types of group activity in any one place at a given time — for instance, group action in the family and group action in the factory. In meeting needs as in mating and in getting food, a group follows cultural as well as biological directives.

Interactions within and between groups, though operating through cultural media, are essentially social psychological. There is another reason for emphasizing the group in studying sociology. It is the relationship of the group to the individual who is a member of it. Whether we work for alma mater, for Sigma Alpha Epsilon, or for the U.S.A., whether we exist for our college, fraternity, or state, or they exist for us, each one of us is interested in himself. Groups are supposed to be good for us either immediately and directly, like a 4-H club, or remotely and indirectly, like a commission for the conservation of natural resources. So groups are important for the effect on their members. An individual becomes like the people he associates with. Every mother knows this who sends her child to Sunday School and tries to keep him from associating with a gang of street-roving delinquents. Hence the importance of the freedom to choose one's associates or the groups one joins.

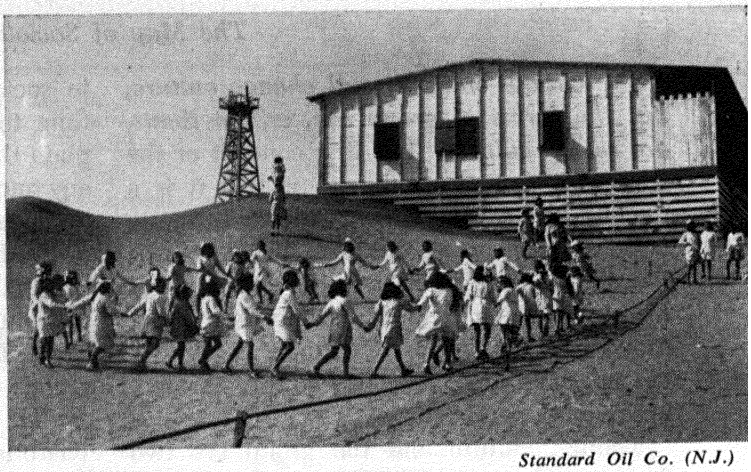
The group is especially important in shaping the personality of little children. This is done, for instance, by the use of praise and blame — a form of group interaction — or by the child identifying himself with some other person and thus imitating or playing the role of another. Athletic coaches are especially skilled in using praise and blame, often more so than mothers. It is also said to be highly desirable for a boy to identify himself with an older male rather than an older female.

These group processes, such as cooperating, fighting, loving, assisting, and imitating,



United Nations Photo

Israel



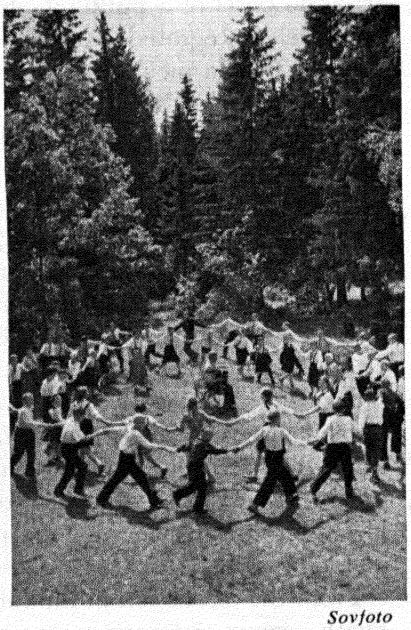
Standard Oil Co. (N.J.)

Peru



Paul Berg, St. Louis Post-Dispatch *Pictures*

United States



Sovfoto

Soviet Union

Switzerland

Copyright by Foto Ernst Brunner

19 The Group Factor

We learn through groups at home and on the playgrounds. The group controls and directs us. Our social life is group life, as are our economic and political activities and most of our religious behavior. The forms and varieties of social life, the myriad interactions between people, are largely explained by the intertwining of group and culture. In the pictures above, note the similarity of the pattern of group play of children in many different lands. Do the clasped hands in a circle symbolize the unity of the group?



which influence the development or change of personality are all found among lower animals but among human beings these activities occur in ways set by culture. Thus boys do not in fighting just bite and kick and scratch and pull. They box or wrestle in ways in which their culture teaches them. Men do not only fight for food or females but for a variety of purposes in response to various stimuli and for various reasons.

Consider the personality of Fung Kwok Keung, born Joseph Rinehart of American parents living in Long Island, New York. When his parents deserted him at the age of three, he was adopted by Chinese, taken to China, and reared there for nineteen years. Recently he returned to the United States. He is Chinese in manner, speech, habit, outlook — in all ways but appearance, and even his appearance has been affected by his behavior. Keung's personality was shaped by group processes of imitating, responding to praise and blame, etc. The same processes would have operated in America. But the product in China was a Chinese personality, and in America it would have been American. The group was the medium by which he learned the Chinese culture. Among the Crow Indians, boys grow up to be fighters, though there are exceptions and some are superior to others; while among the Zuni, boys grow up with little competitive spirit. They are cooperative. Though the group shapes personality, it does so with the assistance of culture. And culture operates through the medium of the group.

The group is important for social life in other ways than shaping personality. For instance, applause is very sweet and hostility of the group very painful. Ostracism — being cast out by one's community — in the days of poorly developed travel was very severe punishment, as Romeo realized. Social behavior is also different according to the size of the group. Teaching and discussing in a class of five are different from what they are in a class of five hundred. And life in a community of five hundred is different from life in a community of five million. Culture, of course, has a great deal to do with the size of human groups.

The interaction of individuals within the group is the subject matter of social psychology, a most interesting and important division of sociology. For instance, one of the most important reactions of an individual to his fellow group members is the great desire for a reputation. Another response to the group is the love of power, the struggle for which fills the pages of history. We also crave social status, and to show it we strut before those of lesser rank. Sensitivity to the opinions of others is at the base of many of these reactions; it makes us conform to social pressure, which builds norms to which we conform.

The adjustment of these interactions makes for group efficiency and their maladjustment makes for failure and friction. The story of our institutions — our family, church, government, etc. — turns on the fitting together of these psychological actions.

However, these institutions cannot be read from a blueprint of our psychological mechanisms. Our psychological heritage does not dictate a single type of family. Nor can we predict our religious or economic institutions from a psychological inventory of man. The great variety of our institutions and customs is due to our capacity to learn. We can learn to use our eyes, ears, hands, to do many different things; and we can learn to interact with our fellow men in many different ways. So psychological behavior becomes social psychological behavior operating in a culture.

In accounting for the varieties of human social life, the group — like culture — is an important explanatory factor because of its great potentiality for variation. We have said that the explanatory value of culture for social life is great because of its great variability, as contrasted with hereditv

in a single species or with natural environment in a single place. The explanatory value of groups is also important, for groups vary greatly, too. Populations may range from the very dense to the very sparse. Communities may extend from the very large to the very small.

Social life, the object of study of sociology, in its widest meaning is explained by four factors, heredity, natural environment, culture, and the group. But the variations in social life are explained rather inadequately among human beings by variations in heredity and natural environment, for in these two factors there is not much variation over time and not much hereditary variation for one large segment of population as compared with another. Variations in social life among human beings, and especially in the United States at the present time, are explained largely by variations in culture and in the group, even though all four factors are essential to sustain human social life.

Since social life, the object of study of sociology, is explained by these four factors, sociology utilizes any knowledge that is helpful in that explanation, even though that knowledge comes from other sciences such as biology, geology, meteorology, psychology, anthropology, technology, or economics. Why exclude any knowledge that is helpful in explaining social life?

THE ORDER IN SOCIETY

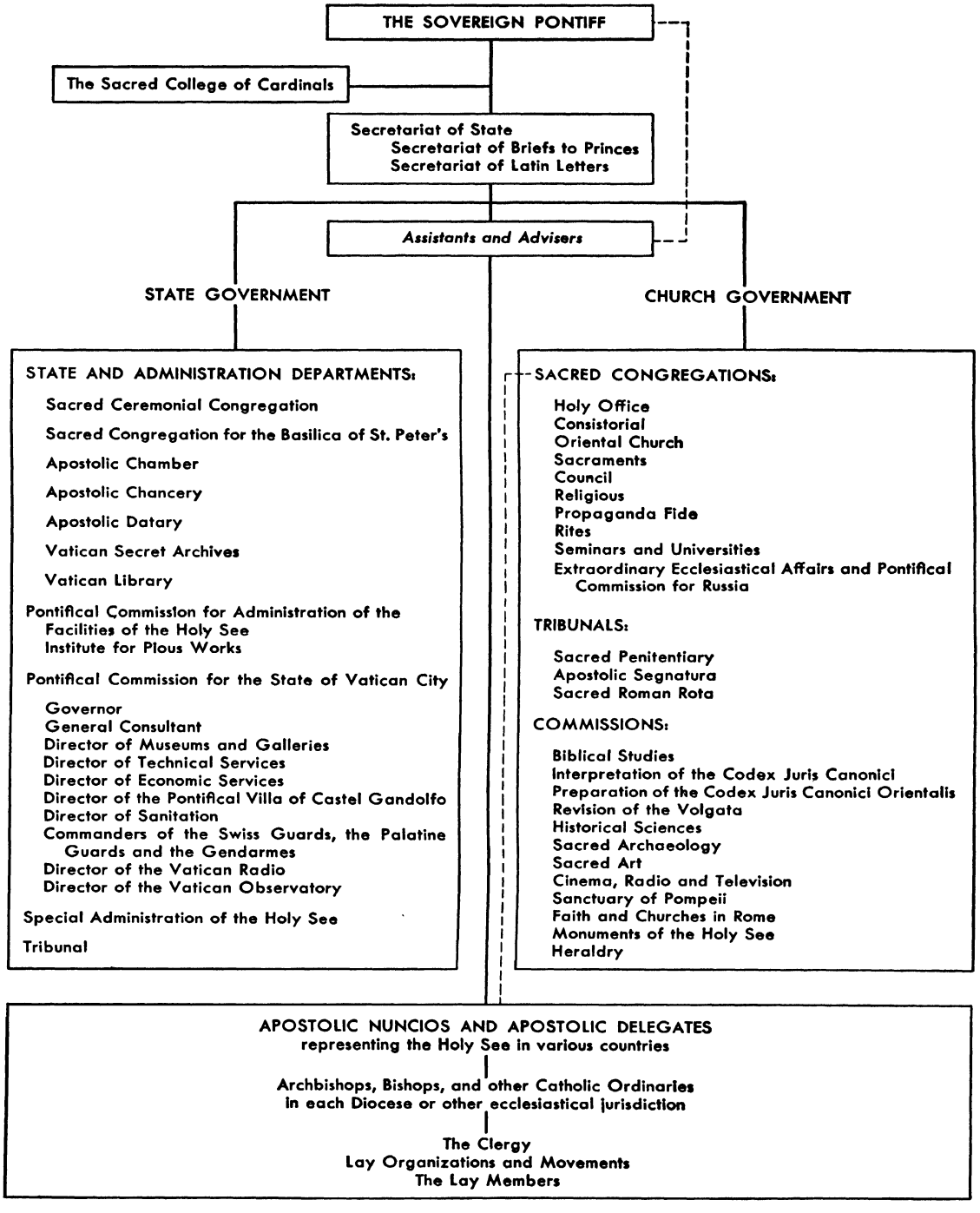
We are now ready to look at more details on our sociological map, but we are drawing this map only to give a perspective, not to look at details. These will be seen in later chapters. We may indicate, however, the nature of these details. They concern the parts of culture and the parts of the group.

There are many kinds of groups and many parts of culture. For instance, some groups such as communities have many subgroups. There are neighborhoods, factories, families, religious groups, social classes, occupational groups, clubs. A group may have a leader and followers and committees. In factories there are managers, office workers, foremen, skilled and unskilled workers.

Similarly the accumulated heritage we call culture consists of many parts. The ways of behaving in the army are different from the ways of acting in a church. But the army and the church, the school and the family are parts of culture, as are law, philosophy, painting, music, ethics, etiquette, books and language, each of which leads to variations in social life.

Social organization is the relationship of parts of society. These various parts are related one to another. The managers have their relations to the foremen. The school and family are related. The groups are related one to another; the parts of culture are related to each other; and the parts of culture are related to subgroups. Furthermore, culture is related to natural environment and groups are related to heredity. Interrelationship of parts is an abstract concept, dull and dry, but you as a student will do well to mark it closely. An automobile is made up of parts. But if the universal joint is missing the car does not run.

Social life was defined as the interaction of individuals. When a person acts, he usually does only one thing at a time or a few things. At another time he does something else. His time thus becomes organized. So, too, most acts are repeated, not done just once. They thus become a habit or if enough persons act in the same way, a custom. Customs become clustered around some function or purpose. When these customs are related to basic needs and are widely spread over time and place, like the customs of rearing children, we call them an institution, in this case the institution of the family. Social organization is fundamental to culture and is found everywhere in groups. So the study of social life becomes the study of social organization.



20 Organization Chart of the Roman Catholic Church

Social life is orderly, with much repetition, which takes the form of customs, institutions, and associations. Much of the social system has evolved through the ages. Some changes in it are planned. The organizations and institutions which comprise the social order and the interaction within them and between them are the main concern of sociologists. (Chart from the American Institute of Management, *Management Audit,* 5(15):6, February 1956.)

Adjustment is a key to social planning and to an appraisal of the sociological map. An organization is a whole, consisting of parts arranged in some order. Since organization involves parts which are interrelated, the adjustment of parts is a basic principle of organization. It follows that a key to organized social life is adjustment, and hence adjustment is a basic idea of sociology.

The idea of adjustment in biology shines out like a beacon light. To Charles Darwin the failure of adjustment meant selective deaths, i.e., the death of the weak and the survival of the fittest. Selection was Darwin's contribution to the theory of the evolution of species.

To Leonard Hobhouse, the great English sociologist, harmony was an integrating principle. By harmony he meant a good adjustment between the parts of culture. Adjustment implies integration. Both deal with parts and the whole. Integration means bringing the parts together. Thus the thirteen colonies were integrated into the United States. We may some distant day have all the nations of the earth integrated into a one-world government. But the integration will not bring enduring coherence, sometimes called solidarity, unless there is adjustment, as for instance in language, or economic interests, of the parts which have been brought together. Adjusting means fitting the parts together. The emphasis is on the fit. Hence adjustment implies the criterion of goodness of fit. It suggests either a goal or a measurement. The North and the South were not well adjusted in 1860, although both were integral parts of the whole, the United States. Between 1861 and 1865 this integration split wide open. So a world government, unless there be a good adjustment among the constituent nations, may fall apart.

In the study of social problems a central idea is maladjustment. Crime is evidence of a bad adjustment to the social order. Such problems as suicide, poverty, and war are dealt with in sociology under the heading of social disorganization. Since organization is a functional arrangement of parts, disorganization is maladjustment.

Adjustment implies a balance of parts, none too heavy, none too light. In order to survive and to function efficiently, an animal must have a balance of parts. The circulatory system must support the masculature and the lungs must be adequate for the blood supply. A well-balanced football team is a joy to a coach. In a steel plant there is an optimum adjustment of blast furnace, coke ovens, and rolling mills. In an army there is a desirable balance of officers and privates.

Adjustment is a key concept in the understanding of social relations. But there are several difficulties in using adjustment as a test of structure.

One is the appraisal of adjustment as good or bad. These are moral terms and are not defined for each situation. Hence they are often expressions of opinion. For instance, there is a difference of opinion whether the adjustment of athletics to college education in the United States in the middle of the twentieth century is good or bad. But because the judgment of adjustment is often hasty, a matter of opinion, and not based on adequate evidence, the concept is not thereby invalidated. Because moralists use the term, it does not follow that scientists cannot use it.

Adjustment is sometimes difficult to measure. It is not always easy to get convincing evidence, for instance, as to whether the laws of monopoly and competition are well adjusted to business or not. But what if scientists stopped doing research because it was difficult!

Sometimes adjustment is not a crucial matter. The functioning of a dwelling is not greatly affected by the color of paint used. Another illustration is the adjustment of occupation and religion. A hunting people and an agricultural people can have the same religion with only minor adjustments.



Courtesy of Ralph Buchsbaum

Caldwell (St. Louis Post-Dispatch) *from Black Star*



21 Biological Adjustment

Lower animals sometimes protect themselves against extinction by enemies by developing a coloring or pattern that resembles the background of their environment. This adjustment is biological, through variation and selection. The walking-stick insect (the stout-bodied object with the two antennae at the top of the picture) closely resembles the dead sticks on which it walks.

Against extinction by enemies, mankind finds protection by changing the environment. Man's enemies are not always the devouring type such as a tiger — although one tiger has been known to kill and eat 150 human beings. More often man's worst enemy is a microscopic virus or germ, a killer more deadly than the tiger. Not a single death from smallpox occurred in 1956 among children who had been vaccinated. But the offspring of these immunized children will in turn need to be immunized.

The same is true with language. All parts of culture do not have to be precisely fitted as do the parts of a watch. Though in some instances the degree of relationship of certain parts is of little importance to the functioning of an organization, in other cases it is of major importance. Thus the adjustment between religion and science is closely related to the functioning of these groups. Also, just because an organization can function somehow with varying degrees of adjustment of parts, it should not be concluded that one adjustment is not better than another. Even the color of paint may affect the functioning of that dwelling as a house. And, because some parts of an organization are more closely related than other parts does not mean that no parts need to be in adjustment for the effective functioning of a given structure.

Adjustment as a principle of organization may be viewed from the standpoint of the four factors in the social life of man.

Adjustment between hereditary structure and natural environment is necessary for life, including social life. There are no communities of men under the seas or in the stratosphere.

Culture helps mankind to adjust to natural environment in various parts of the earth, making it possible for large numbers of people to live at Thule, Greenland, and in the Panama Canal Zone. We can now produce indoors any climate we desire, though the price may be high.

The adjustment of culture and heredity is of great significance as seen not only in bodily illness but in mental sickness. Nervousness and neurosis are generally evidences of maladjustment between culture and inherited nature.

The adjustment of culture and the group has much to do with happiness and human welfare. We use the word happy with reference to the family more than with respect to any other group, and so adjustment in marriage has much to do with happiness or unhappiness. So, too, the adjustment of religious groups is related to the spiritual welfare of a people, which is not unconnected with the release from strain and tension, commonly found in neuroses.

We conclude that the sociologically integrating concept of adjustment is a guidepost to planning, reform, and progress and is a criterion of social evolution.

We have examined the chart which tells what sociology is and which gives a broad perspective of the field. We are ready now to take a closer look in the rest of the book at the four factors, at the different parts of culture, and at the different social organizations and their relationships to one another.

SUMMARY

Sociology is the scientific study of social interaction and its product, social organization. Sociology is mainly a general science, concerned with the processes which are common to all group and institutional life.

Human social life is the product of four factors: biological heredity, natural environment, the group, and culture. Variations in one or more of these factors account for differences in social behavior. In a given society, over time, variations in natural environment and in biological heredity are not as great as variations in culture and therefore do not contribute as much to changes in man's social life. The group also has great potentialities for variation and is, like culture, a highly important explanatory factor.

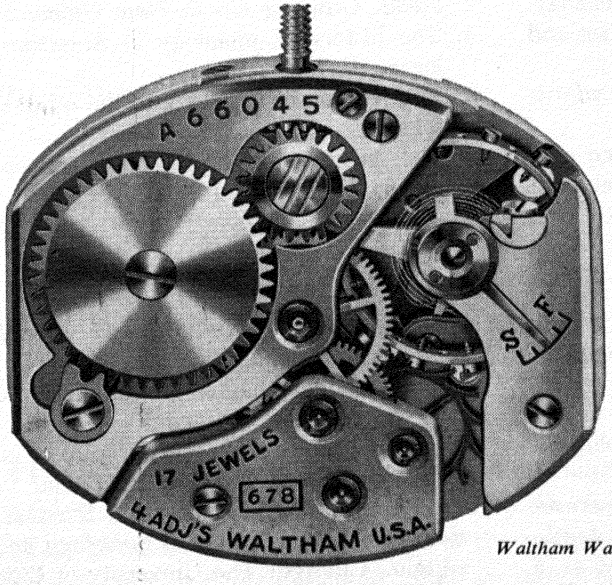
Human society is composed of many kinds of groups and many different parts of culture, related to one another in some kind of system. Since ordinarily these parts are in balance or are in process of achieving balance, social adjustment is a basic concept in sociology and a key to social planning. In subsequent chapters of this book, adjustment as a principle of organization is examined in relation to the four factors in the social life of man.

22 Social Adjustment

Without adjustment, social life could not exist any more than animals or plants could exist without adjustment to their environment. The various parts of a society and culture are fitted together somewhat like the parts of a watch, if they are to function well. Change may upset adjustment, which means that we must make new adjustments. For example, as the United States moved away from isolationism to a position of responsibility in world affairs, the inadequacy of armed forces supplied solely by volunteers led to such new adjustments as the draft and selective service. The goals of social life are often better adjustment which generally brings a happier society. Through collective bargaining, for example, management and labor seek to adjust their differences.



Selective Service System



Waltham Watch Company

New York Times Photo



QUESTIONS FOR DISCUSSION

1. How does sociology resemble and differ from economics?
2. What is meant by the term "factor"? Is a factor different from a cause? Are there any important factors in the social life of man other than those mentioned in this chapter?
3. What is the sociological significance of the observation that variations in heredity are greater between than within species?
4. What is the importance of the fact that natural environment and biological heredity do not change over short periods of time as much as culture?
5. What functions other than the transmission of the social heritage has the group?
6. Why is the group such an important factor in explaining social variability?
7. What makes the interrelationship of parts a significant concept?
8. How is the concept of adjustment related to the four factors in the social life of man?

TOPICS FOR REPORTS

1. Compare the Table of Contents of this book with that of two other books in sociology. Indicate the significance of similarities and differences noted.
2. Limitations of the concept *social adjustment.*
3. A comparison of the cultural heritage of a child born in New Guinea with that of a child born in New York. (See Margaret Mead, *Growing Up in New Guinea.*)
4. The history of sociology in American colleges.
5. The relation of sociology to the other social sciences.
6. The growth of the cultural concept in sociology.

SELECTED READINGS

HANKINS, FRANK H., *An Introduction to the Study of Society.* New York: The Macmillan Company, 1929.

In Chapters 4–9 will be found one of the best statements of the role of the biological factor in social life.

KROEBER, A. L., "The Superorganic," *American Anthropologist* (N.S.), 19: 163–213, April–June 1917. (Also printed separately as a pamphlet, Sociological Press, 1927.)

This article is a classic, short enough to show the evolution of culture against the background of biological evolution without getting lost in details. For a competent effort to classify, compare, and clarify the meanings of the term *culture* and to show its relation to other basic concepts, see A. L. Kroeber and Clyde Kluckhohn, *Culture: A Critical Review of Concepts and Definitions* (Cambridge, Mass.: Peabody Museum of American Archeology and Ethnology, Harvard University, 1952).

LOWIE, ROBERT H., *Culture and Ethnology.* New York: R. R. Smith, 1929.

The first four chapters give a clear picture of the role of four factors — culture, biology, psychology, and geography — in the development of social organization.

PARK, ROBERT E., and ERNEST W. BURGESS, *Introduction to the Science of Sociology,* second edition. Chicago: The University of Chicago Press, 1924.

The classic exposition of the role of the group factor in human experience.

WHITE, LEONARD D. (ed.), *The State of the Social Sciences.* Chicago: The University of Chicago Press, 1956.

A reappraisal, by 32 leading students, of the problems, methods, and goals of the social science disciplines. Especially interesting when viewed in connection with two earlier volumes: *The New Social Science,* 1929; and *Eleven Twenty-Six: A Decade of Social Science Research,* 1939.

Part Two:

Society

Having briefly introduced in the preceding chapter the basic factors in the social life of men, it is desirable for us now to develop more fully our understanding of each factor. Of first importance is the concept of culture, which has, since its introduction and development, done so much to invigorate the social sciences. Hence Chapter 3 is devoted to "The Role of Culture." As for the other factors, man is by heredity a gregarious and a culture-bearing animal, and his society and culture reflect his biological nature. Moreover, man's social life has a geographic setting. Therefore we explore in Chapters 4 and 5 the role of the biological and geographic factors in human society, although biology and geography are not *per se* subject matters of sociology. The role of the group, of special concern to the sociologist, warrants separate, fuller consideration in Part III.

3

The Role of Culture

Aladdin with his magic lamp could not have conjured up anything more wonderful than the social heritage of modern times. The flying carpet that could transport a person through the air to Bagdad was no more remarkable than the airliner of today that takes its sleeping passengers overnight from New York to London. A Chinese from Aladdin's country, while in America, visited a factory where he saw old pieces of wood turned into silken garments. In another place he saw a lump of coal yield more beautiful colors than are found in Nature's flowers. He heard a man talking to America from the icy wastes of the North Pole. Sitting at ease in San Francisco, he saw and heard a baseball game being played in Chicago. He visited great museums of paintings and sculpture, listened to symphony orchestras playing the music of great composers, and saw libraries containing thousands upon thousands of volumes, preserving forever the best thoughts and ideas of the ages. He beheld mansions, capitols, universities, hospitals, factories, skyscrapers, cathedrals, and great collections of these buildings called cities. All these things he considered more wonderful than anything produced by Aladdin's lamp.

Magnificent as are these marvels of modern times, they do not constitute the whole of the social heritage of the twentieth century. The superorganic of the present really defies description. The 5000 courses offered by a modern university do not nearly cover it, nor do the twenty-five volumes of an encyclopedia.

THE ORIGIN AND GROWTH OF CULTURE

One of the best ways to understand culture is to learn something about how it began and how it grew. It is not known precisely how this planet on which we live originated. It may be a fragment broken off the whirling sun eons and eons ago, which later cooled into a revolving ball. Certainly there was once a time when there was no life on the planet. In the beginning all was inorganic matter. These inorganic materials underwent changes due to the influences of gases, changing temperature, pressures, and the contacts of various chemical agents. In the course of a long span of time, life appeared. To the inorganic sphere an organic realm was added. Life assumed a multitude of forms. Cellular structure was organized into such types as insects, reptiles, birds, and mammals. Organisms were continued by cell division or through cell fertilization, all quite wonderful.

Learning

For a time the behavior of animal life was a simple chemical response to stimuli. There was in these early beginnings no learning. One animal could not learn from another, any more than one flower learns how to bloom from another plant. The pea vine climbs around the pole not by learning but in response to the movement of the sun. In somewhat the same way, by means of an inherited mechanism known as a tropism, the moth is automatically drawn to the bright

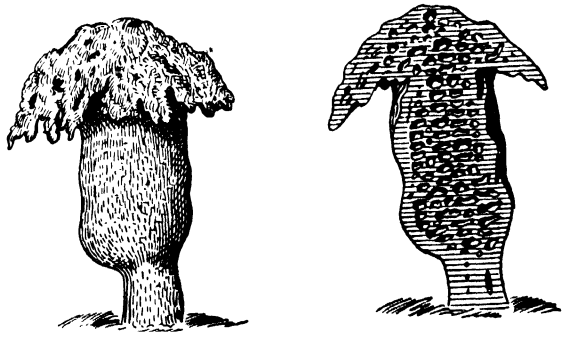
light. Responses of animals which are not quite so rigid and specific and which are more complicated are seen in so-called instinctive behavior, still controlled by heredity. The wasp, for instance, builds a very complicated nest, lays its eggs, seals up the nest, and provides food for the early growth of its young, all by instinct. No imitation, learning, or instruction is involved. If a wasp never sees any other wasp do these things, it will still go through the same elaborate succession of behavior patterns if the proper temperature, moisture and materials are provided.

Likewise, the ants have complex behavior patterns based upon the division of labor, differentiation of status, and different classes of workers; but all these patterns are inherent in the structure of each ant. These patterns never change, except as the ant may change. Professor Wheeler [1] examined ants preserved in the Baltic from the lower Oligocene period fifty to seventy-five million years ago. On the basis of the evidence he concludes that "ants . . . had at that time developed all their various castes just as we see them today. The larvae and the pupae were the same. They attended plant lice, kept guest beetles in their nests and had parasitic mites attached to their legs in the same peculiar positions as our living species." Apparently the ants have not learned anything of significance in fifty million years. Indeed, one might say that the ants have little need to learn much. They have achieved their elaborate social organization by adaptation through heredity (itself a wonderful process) and not through any individual learning. In Figure 23 we see a nest of termites, showing how remarkable can be the working out of instinctive patterns.

[1] William M. Wheeler, "Social Life of Insects," *Scientific Monthly*, 14: 497–525, June 1922.

23 Termite House

The ability to construct such an elaborate apartment dwelling is passed on from generation to generation of termites by the route of the inherited germ plasm rather than by learning. The overhanging cap protects the stem from rain. The height is 44 centimeters. The vertical section shows the connecting holes between the cells. (From a photograph by Herbert Lang in Emerson, "Termite Nests — A Study of the Phylogeny of Behavior," *Ecological Monographs*, 8:247–84, April 1938.)



Learning among animals. Animals developed gradually the capacity to learn, not only in a random way through experience, but systematically from those of their own kind through imitation and communication. Certain gregarious animals seem to transmit continuously through their group life some behavior which the young learn by imitation, such as methods of the hunt and of the stampede, and possibly some slight modifications of fighting and sex behavior. It is common knowledge that mother cats teach their kittens how to catch mice and rats. If the mother cat kills rats in the presence of her kittens before they are four months old, her kittens are almost twice as likely to develop into rat-killers as they are if they witness no rat-killing until several months later. In an experiment it was found that of kittens placed in the former situation, 85 per cent became rat-killers before the age of four months; while for kittens in the latter situation the figure was only 45 per cent. Kittens raised with rats as companions killed none of them, nor any of their kind, and only 16 per cent of other varieties.[2]

[2] Z. Y. Kuo, "Genesis of Cat's Responses to Rats," *Journal of Comparative Psychology*, 11: 1–35, October 1930.

Learning plays a large part in determining whether or not a kitten will be a rat-killer.

The capacity to learn is a function of the physiological system, especially the nerves and their organization. Hence, considerable learning is found among the vertebrates that have a highly developed system of nerves with a central cord. The monkeys and apes learn best of all, though elephants, horses, and dogs also have great capacity to learn. These long beginnings of learning are thus dependent upon biological evolution: the more elaborate the nervous system, the greater the learning capacity.

The superorganic began with learning. With the transmission of behavior by learning, and especially by established learning through the group, a really new order of phenomena begins. It is called the superorganic. From such simple beginnings has grown the magnificent superorganic of today which we call civilization. For instance, from such a transmission as the notes of song from one bird to another, learning has developed a transmission via radio of the sound of the words of a speaker to a hundred million listeners in every land of the globe. From the simple ability of a kitten to learn from watching the movements of its mother in catching a mouse, has grown the ability to record movements on film and to see what is happening many miles away by television. From remembering on the part of one wolf how other wolves avoided danger has grown the art of fixing in print what has happened in the past, so that we can "remember" what happened in Greece 2500 years ago by consulting our great libraries, which tell us also about the origin of the sun and the stars and what happened long before the memory of man or animals existed. We learn how to build airplanes that fly across oceans and around the globe; we learn to catch the power of falling water and light thousands of homes; we learn to sing a music more intricate than a young bird learns; we learn to compute the distances to the stars and transform the light from distant suns into power for man's use. All these things would be impossible if there were no transmission by learning, if the only transmission were by the fertilized egg.

Thus, to the organic and the inorganic is added the superorganic. As was explained in an earlier definition of culture, these are the three great realms of phenomena that make up the earth and what takes place on it. In general, the study of the inorganic is the province of the physical sciences such as chemistry, physics, astronomy, geology. The organic is the field for the biological sciences — zoology, botany, and some branches of psychology. The superorganic falls to the social sciences. Sociology and ethnology study the superorganic in general, while special aspects of it are treated by economics, political science, and social psychology.[3] There are, of course, interrelations of these three great planes of phenomena, and the interconnections are studied also by the various natural and social sciences.

The Definition of Culture

One of the earliest definitions of culture placed its origin with the coming of man, rather than the coming of the vertebrates. The frequently quoted definition of Tylor[4] says that "Culture is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities acquired by man as a member of society." It should be noted, however, that culture, like science or democracy, cannot be under-

[3] A. L. Kroeber, "The Possibility of a Social Psychology," *American Journal of Sociology,* 23: 633–650, March 1918.

[4] E. B. Tylor, *Primitive Culture* (7th ed.; New York: Brentano's, 1924), p. 1.

stood very well from a definition. Redfield [5] also speaks of culture as "an organized body of conventional understandings manifest in art and artifact, which, persisting through tradition, characterizes a human group." Other students of culture, intent on making culture a distinctly human trait, object to calling any of the behavior of the lower animals culture.[6] What we have here, they say, is the projection of a subjective state, like the song of a bird or its ability to fly. In the case of man, objects are created which are distinctive from man himself. The heart of culture, they say, is to be found in the invention and use of tools, that is, in artificial, objective instruments. Culture, as Tylor defines it, is far more than material culture. But even though the material aspect of culture is emphasized for human beings, it is not absent from the world of the lower animals. Köhler tells how one of his apes inserted a small stick into a larger stick and used this device to secure a banana suspended outside his cage.[7] The combination of the two sticks to make a longer stick qualifies as an invention. Rudimentary as it is from the point of view of human culture, it is very advanced and clever when compared to the order of things the lower animals can do.

The essential point in regard to culture is emphasized in the definitions of both Redfield and Tylor. Tylor speaks of culture as being "capabilities *acquired* by man as a member of society," and Redfield thinks of culture as "persisting through *tradition*." The important factor in this acquisition through tradition is the ability to learn from the group, an ability which lower animals have in varying degrees.[8]

The great importance of language. The speaking and understanding of a language was the big event that helped to make the culture of man so magnificent an achievement compared with that of the lower animals. A language that could, merely through delicate variations in sound, transmit an idea such as "the flood came and destroyed the houses" was an achievement far superior to the transmission of states of emotion by a small variety of cries. A highly developed language gives a capacity for conveying ideas about a tremendous variety of things. Furthermore it is because of language that man has been able to perpetuate his knowledge over many generations.

Among apes, although there is no indication of anything approximating language, there is some evidence of the beginnings of symbolic experience in their gestures, emotional cries, and calls. Of these elements of communication, Learned [9] identified thirty-two related to food, drink, other animals, and persons. Since a young ape cannot learn a language, even when he is taught, while a human infant can, we infer that the capacity for language rests upon a biological development, the exact nature of which is still obscure. The sharp break between the crude communication of the highest apes and the language of man does not, however, imply that language was developed suddenly.[10]

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[5] Robert Redfield, unpublished lectures, Social Science Series, University of Chicago.

[6] Clarence Marsh Case, "Culture as a Distinctive Human Trait," *American Journal of Sociology*, 32: 906–920, May 1927.

[7] Wolfgang Köhler, *The Mentality of Apes* (tr. from the 2nd rev. ed.; New York: Harcourt, Brace & Co., Inc., 1925), pp. 130 ff.

[8] Cf. Hornell Hart and Adele Pantzer, "Have Subhuman Animals a Culture?" *American Journal of Sociology*, 30: 703–709, May 1925; also Read Bain, "Culture of Canines," *Sociology and Social Research*, 13: 545–556, July 1929.

[9] R. M. Yerkes, *Almost Human* (New York and London: Century Company, 1925), pp. 137 ff.

[10] For the best knowledge we have on the origin of language, see the chapter on language in Franz Boas (ed.), *General Anthropology* (Boston: D. C. Heath & Co., 1938).

So important is language in the transmission of culture, that the symbol is considered by some as the unitary element in the cultural structure. Animals learn without symbols by responding to stimuli, as a cat does in catching a rat. The symbol involving the letters in the word "move" is also a stimulus to which man reacts. By putting two or more symbols together, such as "re-move" or "move-ment," new symbols are created. Language is a truly marvelous collection of such symbols with incredible possibilities for learning, as is seen in the collection of symbols in this sentence, which conveys no meaning to any other animal than man.

The fact that the lower animals do not have language makes understandable the vast difference between the superorganic of the lower animals and that of man. The difference is so great that by comparison the culture of the lower animals seems slight, even negligible, and it is customary to say that culture originated with man. For many purposes this statement is true enough. However, if one is interested in learning something of the time required to develop the superorganic and something of the role of the biological factor in its development, then it is not accurate to say that culture began with man.

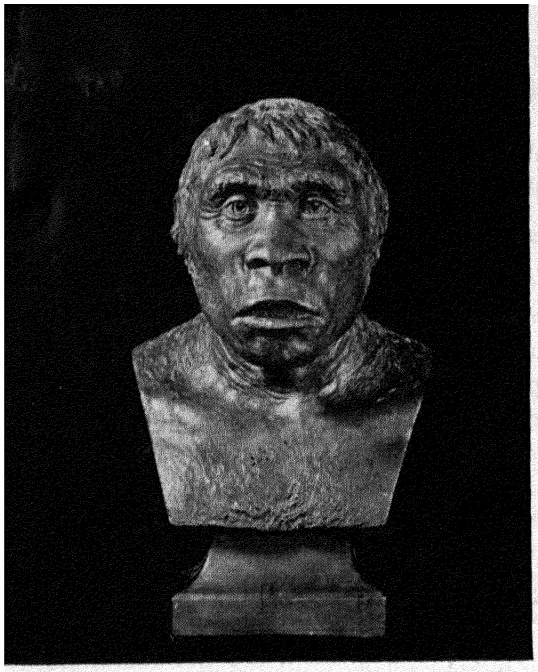
The comparison of cultures. The study of the origin and development of the superorganic should lead us to be more cautious in comparing and ranking cultures. For instance, can we say that the culture of the Eskimo is a simple, crude culture? Yes, by comparison with the twentieth-century culture of the United States it is simple and crude; but by comparison with that of the lower animals it is tremendous — the result of a long, long period of development. The culture of the Eskimos must also be very advanced compared with that of the manlike creature who was just developing a crude language a half-million or a million years ago.

Early Human Cultures

Time table of early cultures. Since we are discussing the early beginnings of culture, it is important to get some idea of time, which we ordinarily express in years. But about years the experts differ widely. So the practice is to use geological and climatalogical phenomena such as glaciers, about which there is less dispute. These periods are presented in greater detail on later pages, but we indicate here a few points to guide the reader.

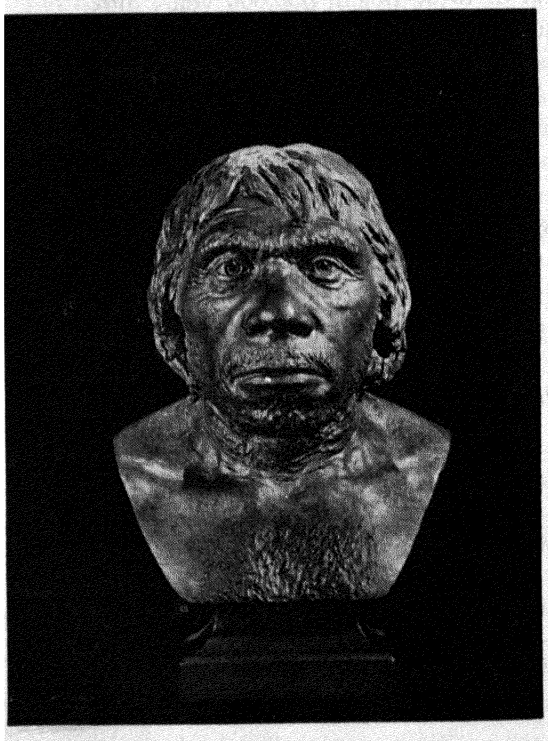
Men, and near-men, are not found until the Pleistocene, the geological period of the ice ages which followed the Pliocene. There were four glacial periods when a huge ice cap such as is found now over Greenland covered the northern part of the United States and the northern part of Europe. The first of these began 500,000 years ago. The long interglacial period between the second and third glacial periods existed about halfway through the Pleistocene, and extended from approximately 300 to 200 thousand years ago. It is during the last glacial period that most of the data about early man and early cultures are found. The middle of the last ice age was about 50,000 years ago. The recession of ice, which proceeded irregularly over 25,000 years brings the end of the Pleistocene some 10,000 years ago. This time schedule is summarized as follows in years which are approximate only.

500,000 years ago	The beginning of the Pleistocene
250,000 years ago	The middle of the Second Interglacial Period
50,000 years ago	The middle of the Last Glacial Period
10,000 years ago	The end of the irregular recession of ice



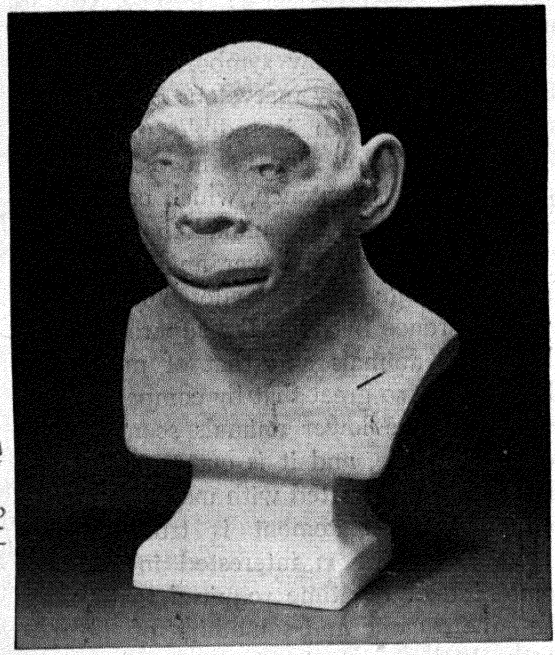
Pithecanthropus

Neanderthal



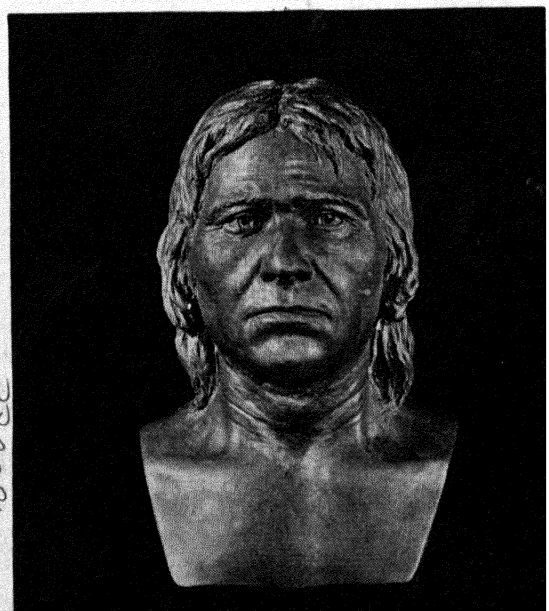
(Photos of Pithecanthropus, Neanderthal, and Cro-Magnon from the American Museum of Natural History; photo of Sinanthropus from the University Museum, University of Pennsylvania.)

24 Reconstructions of Early Men and Their Still Earlier Relatives



Sinanthropus

Cro-Magnon



It was a long climb upward. If, for brevity, we use only one measure to indicate the evolution of man, the size of the brain case seems to be preferable to any other. Although the size of the brain is not a very exact measure of the inherited mental capacity of any one individual, brain size is a valid index of learning ability when we compare species of animals, in general. The smaller-brained animals have less learning capacity than the large ones. And it seems very probable that growth in learning ability from ape to man has roughly paralleled the growth in brain size.

It must have required a long time to evolve a brain size from 510 cubic centimeters (the measure of the brain case of the average gorilla) to 1500 cubic centimeters (the approximate size of the skull of man). Skeletons have been found in South Africa of an extinct species of ape, the erect Australopithecoid, whose several brain cases approach in size the maximum attained by the gorilla (600 to 650 cubic centimeters). The famous Pithecanthropus, of whom several new specimens have been found, had a brain case that ranged from 775 to 935 cubic centimeters,[11] some 35 per cent larger than the brain of the Australopithecoids. A little larger still were the skulls of Sinanthropus, found near Pekin, which ranged from 915 cubic centimeters to 1225 cubic centimeters.[12] With Sinanthropus there is evidence of the use of fire and the earliest find of man-made stone implements in conjunction with skeletal remains of man. These choppers are large with an edge at a not-very-sharp angle. They are better fashioned than the eoliths, the earliest tools, only some of which may have been made by man. Thus fire and the earliest known man-made tools and creatures with skulls around 1050 c.c. in size belong in the middle Pleistocene of 200,000 to 300,000 years ago.

The culture of the famous Neanderthal. The next stage in the evolution of man, about which we know much for certain, concerns a man whose skull was around 1550 c.c.[13] or slightly larger than modern man's.[14] This skull was nearly 50 per cent larger than the skull of Sinanthropus and existed perhaps 200,000 years later. Neanderthal man's skull was large, his forehead was sloping, and the height of his skull was low. He had heavy brow ridges and he is supposed to have walked with slightly-bent knees.

These Neanderthal types have been found in Western and Central Southern Europe, in Palestine, in South Africa, and importantly in Java where Pithecanthropus lived. The Neanderthal finds over such a wide area show many differences. These men lived certainly during the middle of the last glacial period, or approximately 50,000 years ago; and a good many finds have been assigned to the warm period just preceding the last glacier.

One may guess from the large brain that the Neanderthals had a well-developed language through which to transmit their culture which is called the Mousterian culture. The names *Mousterian* and *Neanderthal* are accidental. Some extensive archaeological finds of this culture were made in a cave at Le Moustier, France. Among the first skeletal remains of early man was a skull found in the Neanderthal Valley near Düsseldorf. These names were applied subsequently to other similar finds.

[11] James H. McGregor, "Human Origins and Early Man," in Boas, *op. cit.*

[12] William Howells, *Mankind So Far* (Garden City, N.Y.: Doubleday & Company, Inc., 1945), pp. 142–150.

[13] *Ibid.*, Chapter 13.

[14] We do not think much significance should be attached to the greater size of the brain of Neanderthal man for several reasons. The variation is slight. The erosive forces of nature may have favored the survival of large skulls. Also we know the brains of wild dogs are bigger than those of domestic ones of the same species.

In this culture, for the first time there appears an extensive use of stone implements made from flakes of flint. Because so little remains of the prehistoric cultures, and because out of these remains it is the stone implements which have been best preserved, archaeologists long ago adopted the practice of classifying levels of culture by the degree of sophistication in making stone implements. Hence the terms paleolithic (old stone), mesolithic (middle stone), and neolithic (new stone) ages. The Mousterian flints are paleolithic.

Prior to the Mousterian flints, there had been an evolution of flint-making, many specimens of which have been found, but with few skeletal remains accompanying them. These pre-Mousterian specimens were generally cores of flint, shaped like the two hands placed palm to palm but not so large. Neanderthal man apparently had not learned to make implements of bone. He laid his dead out in such a way as to suggest religious rites. Presumably those who lived at the edge of the glacier wore clothing. There have not come down to us, of course, facts about his family, his child-rearing, his government, his customs, his clothing, or the position of women in his society. If our own society were destroyed and buried under earth for 50,000 years, only metals and very hard objects would remain. With nothing more than these to guide him, it would be difficult for an archaeologist 50,000 years hence to tell much about our social, political, and economic life.

The biological factor in the early evolution of culture. The evolution of the braincase from 850 c.c. to 1550 c.c. possibly required 300,000 years or longer. Though skulls with capacities of 600, 800, 1000, 1200, and 1400 c.c. have been found in various parts of the world, this does not mean the various specimens were in a single evolutionary line. There were probably several different lines with all becoming extinct except that line which evolved into man. Indeed *homo sapiens* may have existed long before the period (25,000 years ago) that dates the earliest finds of Cro-Magnon man. The evolution from a brain 500 c.c. in size (when man's progenitors certainly had no language) took much longer than 300,000 years. Man was using tools, however, with a brain of only 1050 c.c. The tool was a crude chopper, flat on one side and with a poor edge. To reach the flaked flints of the Mousterian culture may have taken 200,000 years. Man's culture was not evolving rapidly, and it probably was dependent on his biological evolution. In other words, the biological factor may have been a very important one in the growth of culture until the late Pleistocene when, we know, *homo sapiens* existed. We call this early modern man Cro-Magnon man.

The mesolithic culture during the recession of the last glacier. A young Cro-Magnon man of 25,000 years ago, if alive today and dressed in modern clothing, would pass unnoticed on a college campus except for the observation that the football material was unusually good. Besides being big, he had a big head, 1650 c.c.,[15] a hundred cubic centimeters larger than modern man's.[16]

Since he lived later, more of his culture has been preserved. He made extensive use of bone, horn, and ivory, as indicated by harpoon throwers, harpoon heads, and needles. His jewelry was pierced shells or teeth. The famous colored drawings in the caves of Spain and France were made by the Cro-Magnon. His statuettes of women emphasize fertility, and there are aspects of hunting and trapping portrayed. Some of these artifacts are shown further on in this chapter in Figure 27.

[15] A. L. Kroeber, *Anthropology* (New York: Harcourt, Brace & Co., Inc., 1948), Chapters 4 and 16.

[16] The Cro-Magnon men were big, around six feet or more. Hence their stature may have been a factor in the size of their brains.

The material culture of the Eskimos of the present and that of the Cro-Magnons of the Magdalenian era are very similar. The culture of the Magdalenian era is now called the mesolithic, a stage following the paleolithic and preceding the neolithic. If the Eskimo were blotted out for 10,000 or 15,000 years, the hard remains might be mistaken for a variation of the Magdalenian culture. The similarities of the material cultures suggest that there may have also been similarities in the non-material culture,[17] such as in social customs, family life, religious practices, etc.[18] So we present a few pages about the Eskimo culture, which we know well, for suggestions which bone and stone will not alone spell out.

The Culture of the Eskimo

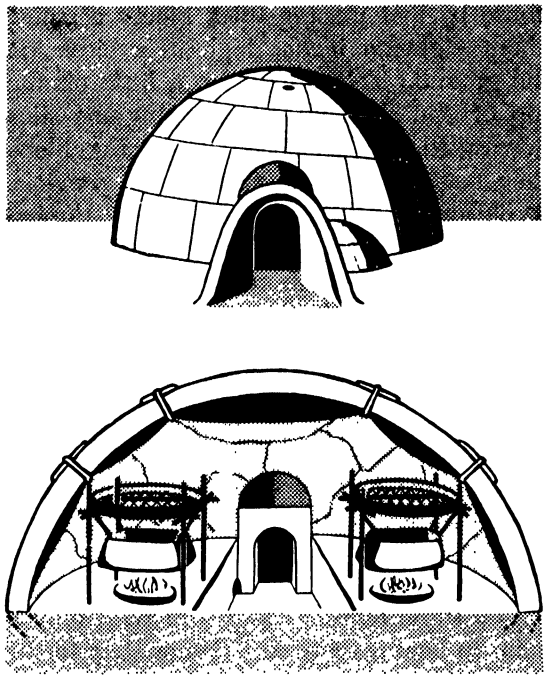
Material culture. The Greenland Eskimos live in snow houses which a clever native can build between the end of a day's journey and supper time. Its shape is like half of a ball. The Greeks were never able to build a dome, though their architecture was well developed, as evidenced by their beautiful temples. The Romans added this architectural accomplishment of the dome. These Eskimos build a dome-shaped snow house by first placing thick blocks of snow about eighteen inches high in a circle on the ground. They then slice a little off the top of one slab of snow, sloping the slice downward. In slicing the adjoining block they begin where the slice in the previous block ended and cut off still more, sloping the cut downward. By the time they have sliced down each slab all the way round the circle, the last remaining block is sliced to the ground on the end that adjoins the first block. There is thus a spiral on which the second tier of slabs can be placed, without having to hold them in place by hand. The spiral winds upward until the last block of the dome is placed, enclosing the roof completely. From the interior the Eskimo then cuts out an entrance way.

The snow house is so warm with only a lamp to heat it that the Eskimos strip to the waist when inside. Yet the snow does not melt. How does it happen that the house does not melt? The answer is the same as the engineer's who maintains a freezing temperature in an icebox when the temperature outside may be 100 degrees. The Eskimos achieve insulation by suspending skins from the snow roof, with a wide layer of air between the warm skins and the cold snow blocks. Ice may be used as a window. Transparent windows of glass did not come into use in Europe until the Middle Ages. Whether the Cro-Magnon men built snow houses is not known, since no evidence could be left of such an achievement.

For transportation the Eskimo uses a sled on land when the snow is hard. If no driftwood is to be had, and bone is not available, he can make a sled out of frozen salmon and walrus hide. The salmon are placed end to end, rolled up in skins and left out to freeze. The whole roll is later lashed together into the sled. To reduce the friction, a little water is laid on which quickly freezes producing a slick, flat, smooth runner, which also protects the leather from wear. With

[17] Hobhouse has shown not very close correlations between the material cultures and social institutions of the existing preliterate cultures. For slight variations, this conclusion is correct. But over wide variations there are correlations. For instance, the size of communities is bigger when people manufacture with mechanical power than when people hunt animals with stone tools. Also, among most peoples whose pursuit of food is hazardous, there are fewer men than women, with accompanying family situations.

[18] Peter Freuchen in his book *Ivalu* writes an actual biography of an Eskimo woman, his wife, who grew up without any knowledge of the white man or of his culture. If we could find in one of the caves of the last ice age a biography of a Cro-Magnon ancestor, one wonders whether it would be much different from the life of Ivalu.



25 Eskimo Snow House

The Eskimo achieved the dome, which was not produced by the Greeks, by cutting the snow blocks in a spiral form. The principle of insulation shown in the lower picture enables the Eskimo to keep warm inside without melting the snow on the exterior. (Based on drawings in the *Sixth Annual Report of the Bureau of Ethnology,* Washington: Government Printing Office, 1884–85, p. 543.)

trained wolves to pull the sled, the Eskimo can travel much faster than a horse and buggy can on bad roads.

For water transportation the Eskimo has a skin boat that is as beautiful and graceful as a birch bark canoe, and more efficient. The long, light boat is completely covered with waterproof skin, except for the opening which is about as big as a small barrel hoop. When an Eskimo is seated in this boat with his skin coat strapped around the hoop-like opening, the boat can be turned over by a wave or a walrus and then righted without dislodging the occupant and without getting any water inside.

These effective methods of travel are very useful, for the Eskimos are few and widely scattered. All the Eskimos in the world could, as Edward Weyer phrases it, be seated in the Yale Bowl without filling half the seats. Yet the Eskimos are scattered over a territory 800 miles wider than that from New York to San Francisco, and north and south over a distance greater than that from Canada to Mexico. The Eskimo is a great traveler. He must travel a good deal to get the desired food. But he also likes to visit, even if it requires long trips.

The Eskimo has, it is agreed, the most perfect shoe in the world. It is so good that all the arches in an adult's foot, including the arches in each of his toes, are unbroken. If the shoe did not fit well, the place where the leather pressed on his foot and cut off the circulation of the blood would freeze. He has learned also that if he does not change the straw or moss in his shoe after a day's use, it will not insulate as well and his foot will freeze.

The Eskimo shows his ingenuity also in his hunting. His enemy, the wolf, is difficult to hunt. One way to hunt him is to bend a piece of whalebone, sharp at both ends, and enclose it in a morsel of fat, which is then frozen. The wolf swallows the food at a gulp. It melts in his stomach, the whalebone punctures his stomach, causing death. Or the Eskimo may place blood on the point of a sharp knife, which attracts the hungry wolf. Licking the knife the wolf cuts his tongue. As the blood on the knife increases, he licks it more, so that eventually he drops from weakness.

The Eskimo has constructed a clever device for following the course of a wounded sea animal in flight. Tied to the harpoon, which remains in the animal, are several inflated bladders which tend to float like a buoy on the surface of the water. To slow up the flight of the wounded game is an object like a large tambourine, attached to

the bladder float, which offers resistance to movement through the water, as a parachute slows up the speed of a falling object in the air. This resistance saps the strength of the walrus.

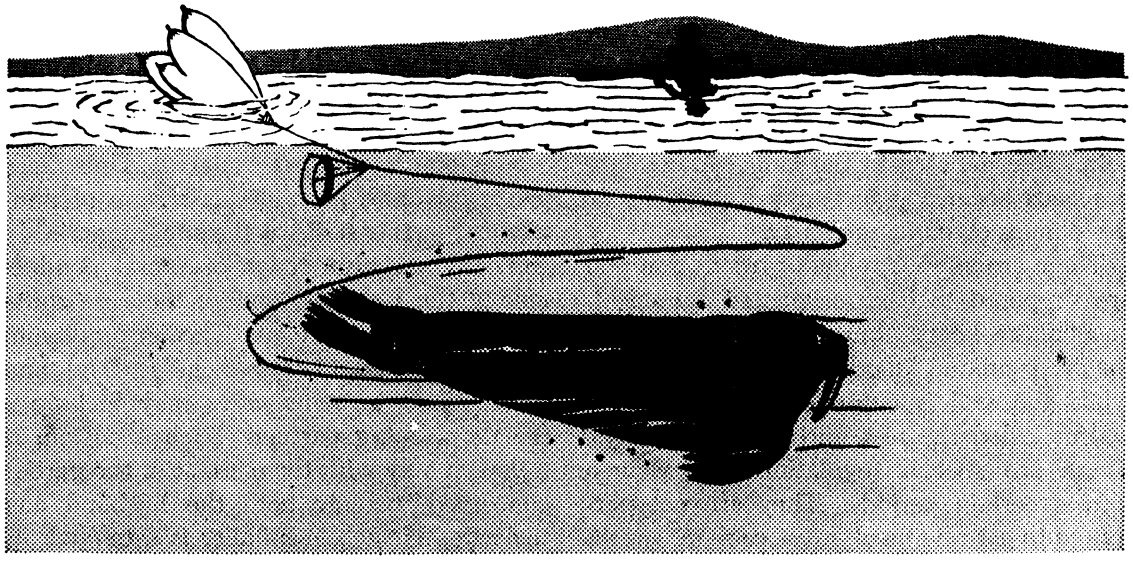
These inventions are those of ice-age men who had only bone and stone to work with. In modern America, with all our technological equipment and scientific knowledge, a number of years were required to invent the drinking fountain, which called for only enough ingenuity to turn a faucet through an angle of 180 degrees. The Eskimos display much mental ability in the field in which they operate. If they were to disappear and 20,000 years from now an anthropologist were to uncover the ruins that would be left, it would be difficult for him to imagine from the few bone and stone remains what clever inventors, builders, travelers and hunters these people were.

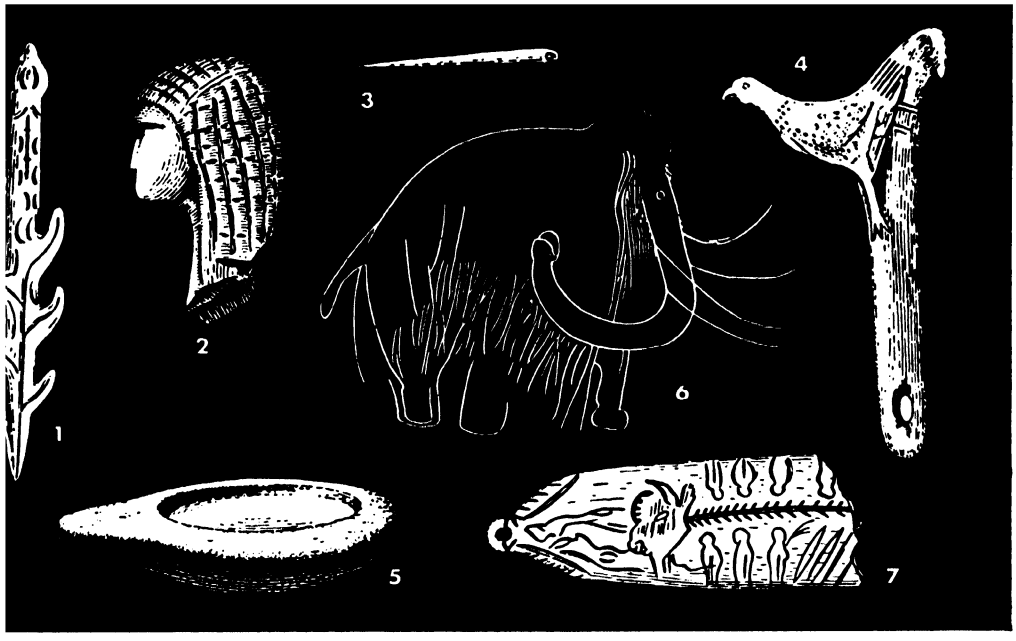
Non-material culture. The Eskimos also have a religion. We do not know, of course, what the religion of the Cro-Magnon man was. The chief deity of the Eskimo is a goddess named Sedna, who lives at the bottom of the sea with her father. Sedna is in control of the sea mammals, the whale, the walrus, and the seal, which are the most important food supply. Sedna controls the weather, and when she is angry for one reason or another she shows her anger by sending storms and cutting off the food supply.

The religious leaders or priests are known as *angakut.* They are very powerful, since they deal with Sedna over such important matters as storms and food supply. They are vested with other powers by supernatural creatures known as *inua.* Thus the *angakut* are enabled to perform miracles, such as healing the sick or injured, or driving away a famine. The simple Eskimo hunters thus have a cosmology and religious leaders. The formation of such religious ideas represents a high degree of intellectualization of concepts. There are also

26 A Drag, with Floats

An Eskimo device for following and slowing up a wounded walrus.





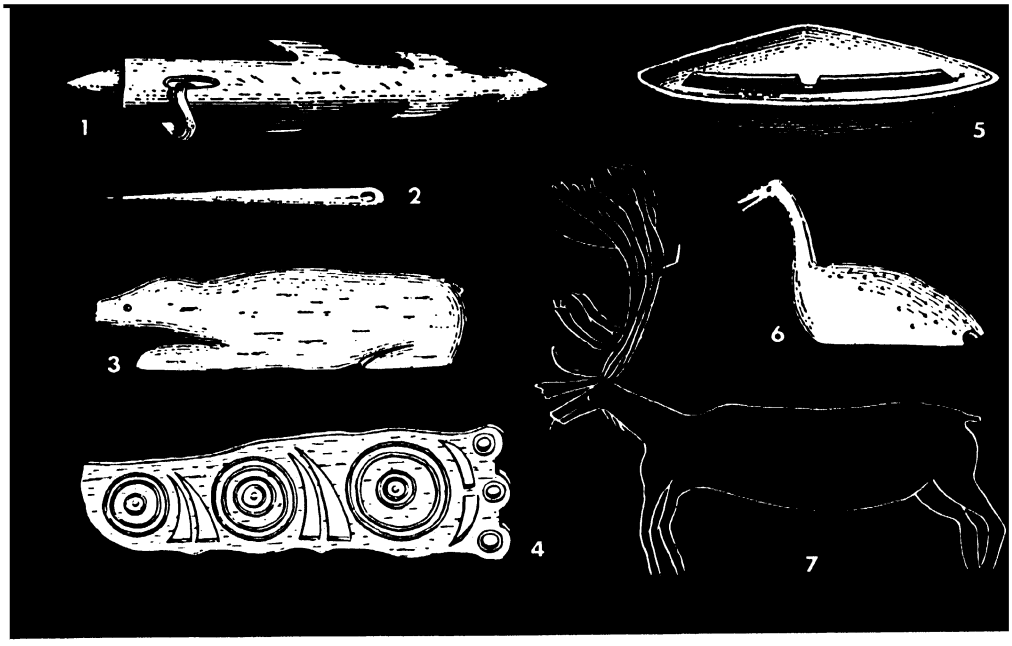
27 Magdalenian Implements and Art

This is the period of Cro-Magnon man. (1) Harpoon. (2) Young female head in ivory, from the Grotte du Pape at Brassempouy. (3) Bone needle. (4) Magdalenian dart-thrower of reindeer horn, from Mas d'Azil, Ariège. (5) Lamp of gritstone, from the cavern of La Mouthe, Dordogne, France. (6) Wall engraving of a mammoth in the caverns of Les Combarelles, Dordogne, France. (7) Bone pendant which had served as a hunter's tally, from the cave of Raymonden at Chancelade, Dordogne, France. (Based on drawings in George C. MacCurdy, *Human Origins,* New York, D. Appleton & Company, 1924.)

houses for religious services. These are great houses of snow dedicated to some special supernatural creature who is thought to be unusually helpful to human beings. These great snow houses are for singing and dancing, which are the chief forms of worship. The dancing in the long winter night proceeds according to ritual, leading up to the climax of dancing frenzy.

There are various religious rules. The seal are supposed to have originated from Sedna's fingers, hence atonement must be made for every animal killed. All work must stop while the seal is cut open, and for every walrus killed the rest period is three days. There are special regulations for women during certain periods. They are not permitted to eat raw meat, must cook in certain pots, and cannot take part in the festivals. In case of violation of these taboos, a black object which is visible to the animals of the hunt is supposed to attach itself to the culprit. Seeing this they run away, and thus the food supply is threatened. To prevent famine, a public confession is necessary, whereupon the guilt is expiated. Thus there are regulations, laws, and a system of punishment at this stage of the superorganic.

There are also codes of moral conduct among the Eskimos, though they are quite different from our own. The hospitality to a lone traveler always includes food and shelter, and in some cases may include a female sleeping partner. Such a custom is followed only with the consent of the parties concerned, namely both the husband and the wife. If such hospitality is extended, its rejection is considered an insult to the



28 Eskimo Artifacts

Note the close resemblance to the Magdalenian artifacts. The Eskimo today lives much as the European ancestors of some of us lived tens of thousands of years ago when northern Europe was an ice cap. (1) Toggle heads for harpoons, from Point Barrow. (2) Needle for stringing fish. (3) Bear effigy. (4) Ornament for wooden hat, from Alaska. (5) Lamp, from Labrador. (6) Bird effigy, from St. Lawrence Island. (7) Wall engraving. (Drawn from specimens in the Peabody Museum, Harvard University.)

woman and the host. The man is head of the house and sexual irregularities without his consent are severely punished. Thus there are rules of behavior in sex matters, and in no sense is there promiscuity. An elderly Eskimo, unable to hunt or be of use, often goes away to die alone, or voluntarily asks to be left behind when the family moves on, particularly if the food supply is short and one more person to feed is likely to be a danger to the group. Or, failing voluntary action, the group may decide to leave the old one behind to die alone.

The Eskimos seldom fight. It is not known, of course, whether Cro-Magnon man was much of a fighter or not, but certainly the Eskimos, an ice-age people, are most peace-loving. There is, of course, a good deal of nonsense in our folklore about the savagery of wild men, and the imagination of the comic strip artist who deals with Tarzan is not very realistic. The Eskimos have blood feuds between families and local groups, as do nearly all primitive peoples. The family makes a reprisal for an injury to one of its members. In lieu of fighting, the Eskimos settle some disputes by a combat of ridicule and repartee. The affair is settled in the presence of the group by a satirical contest conducted in song, the lines of the song being improvised as the duel proceeds. The audience recognizes the merits of the points made, and one of the contestants is soon recognized as clearly the victor and the other the vanquished in this contest of wit and argument.

The Eskimo people have good health. Disease was rare, if not unknown, before

the coming of the white man, despite the fact that the Eskimos are not very clean in their habits. The environment with which they must cope is difficult enough to discourage anyone, yet the Eskimos are acknowledged by all observers to be a very happy people, with little irritability, grouchiness, or nervousness.

Eskimo social organization is based upon the family and village community. The males of the family are the producers of food and the builders of houses, while the women prepare the food and make the clothing. Sharing of food or goods among the families of the group is common. Since the villages are made up of very few families, there is a common bond between the different families much as between the different members of the family. Hunting parties are made up of men from different families. There is very little organized government. Power is vested in two types of leaders, the *angakut* and the best hunters. Leadership is not hereditary or definitely organized. It simply gravitates to the capable.

Cro-Magnon men were wonderful artists, their work being quite comparable to that of modern artists. The Eskimo art is less notable, though they do excellent work, as seen most strikingly in their dress and in their carved ivory. The patterns and designs of dress for males are in general more artistic than our own. The furs of modern women are no more beautiful in color and design than those of the Eskimo. The latter are skilled in carving figurines and can make a beautiful, delicate necklace out of a single piece of ivory without a break in a single link.

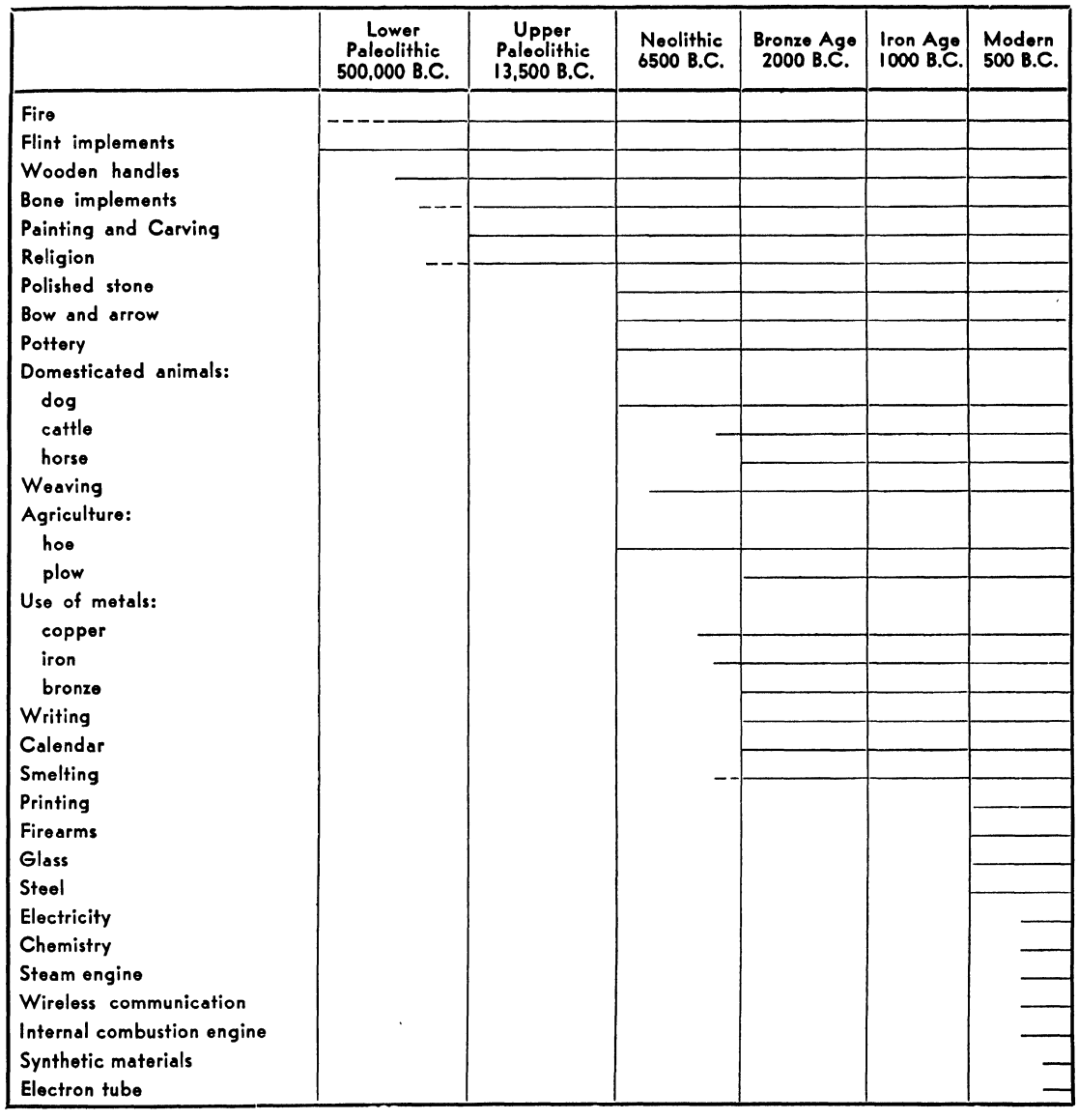
This thumbnail sketch presents a few items in the culture of the Eskimo. It is much more elaborate and complex than here indicated. Volumes have been written on their religion alone,[19] and might be written on their art or any other phase of their culture. But enough has been presented to show how bare an indication the chipped stones and worked bone are of the other features of culture. By the time of Cro-Magnon man in the last ice age, not only was there a man as highly evolved biologically as modern man, but it is probable that the superorganic had all the essentials of modern culture — that is, tools, houses, clothing, religion, law, ethics, philosophy, art, language, family, economic and social organization. By the time of Cro-Magnon man, culture must have come a long way from what it was 500,000 years before for Pithecanthropus with his half-way skull. But that long span is a blank in our knowledge of what stages the superorganic had attained, though there are being recovered fragments of skeletons that yield a picture of the changes in the skull.

[19] Knud Rasmussen, *The People of the Polar North* (London: K. Paul, Trench, Trübner and Company, 1908).

Growth of the Superorganic Since the Ice Ages

The superorganic grows more rapidly. As the ice cap receded from central and northern Europe to its present position on the tip of the world, the skull of man grew no bigger; indeed, it may have become smaller. But the superorganic continued to grow more and more rapidly. The stone tool-making culture became more skilled and refined. Man also later learned to domesticate plants by setting out shoots and by planting seed. More abundant food in turn made possible communities of large size with more types and variations of social organization. The social life of agriculturalists is in general much more organized than that of wandering bands of hunters. The Eskimo social organization is quite simple. The stability of life in larger communities encouraged the making of pottery.

The neolithic revolution. To these arts, which are found widely distributed in various lands, were added several important



29 Chronology of Important Inventions

The dates are approximate. A difficulty in fixing the date of origin of important inventions lies in the fact that they generally do not arise abruptly but rather have a long period of evolution. For instance, writing was perhaps 2,000 to 3,000 years in developing.

contributions just before the beginning of history in the old world. Big power animals like cattle and horses were tamed, and the wheel was invented. It was not, however, until after the Roman Empire that good harnesses were devised, enabling man to get the most power out of the horses, and the wheel never came into considerable use in transportation until good roads were achieved, first by the Romans and later in the Middle Ages in western Europe. The domestication of grains like millet and bar-

ley brought a rather durable food supply. Such grains could be stored for a fairly long time. This combination of domesticated animals, such as cattle, horses, goats, and sheep, and the cultivation of grasses whose seeds could be stored, such as barley, which occurred first in Southwest Asia, was the high point of neolithic culture. With it came property in land and other goods. Social classes, and sometimes slavery, also appeared in many places where there were cattle. As cultivated lands became depleted, these neolithic peoples moved on to new lands, and this migration led to the practice of war. This neolithic culture eventually replaced most cultures based on the gathering of foods.

The boat must have been present rather early, possibly appearing in the culture of the ice ages; but it was improved, and by the dawn of written history sails were known.

Copper and gold were picked up from among the rocks, and meant a good deal in the making of art objects and containers. The clever discovery of alloying copper and tin into hard bronze brought a tool and weapon that was to displace stone. Iron used in the culture of Africa and Asia soon made a better tool, but one less amenable to art expression than bronze. The superorganic in the Americas never incorporated the metals, except for ornamental copper and gold. Nor did the Americas have the wheel, horse, or cattle, though the llama was tamed and used as a pack animal. In America, however, counting was well developed and the zero was in use at a time when the Romans were struggling along without it. In both Egypt and Central America a calendar was added.

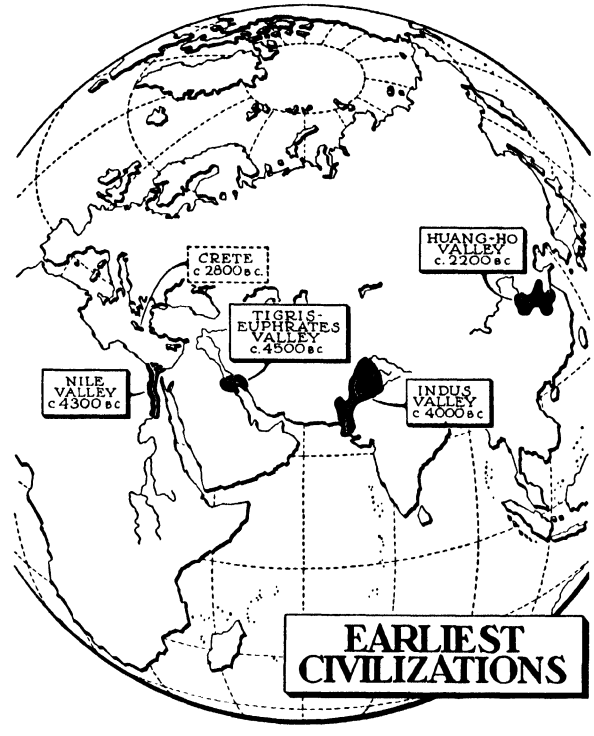
The origin of civilization. Culture was growing more rapidly in mesolithic and neolithic times than it had been during the ice ages, if we may judge from the material remains. The people along the Euphrates and the Nile at this time found themselves inheriting a much more highly developed superorganic than did the men of the old stone age. Writing became perfected after a long period of improvement. In America it had reached the pictograph form among the Mayans by the time of the coming of the whites. Writing was of tremendous importance for the growth of the superorganic. Since culture originated with the transmission of ways of behavior by learning from the group, it is readily seen that writing, which facilitates transmission, is in the same general order of importance as speech itself.

History begins with writing, as does civilization. Civilization may be defined as the latter phase of the superorganic. Actually the word civilization is derived from the type of social organization. Preceding civilization, society in Europe and western Asia was organized on a kinship basis, with different clans recognizing varieties of kinship. With the development of towns and larger communities, kinship was greatly reduced as a factor of social organization and relegated largely to the family, as is the case with us today. Groups were organized on a civil basis as cities are at the present time. Hence civilization. Indeed perhaps the most realistic dating of the beginnings of civilization was the time when cities appeared on the Indus, the Euphrates and Tigris, and on the Nile. Many of these cities we would call towns or large towns, but they were large enough to reduce the influence of the kinship social organization and to develop civil status. The cities such as Mohenjo Daro, Ur, and Thebes could not have existed without very fertile lands to supply the food. The cities in turn had to protect with military forces the all-important food sources. They were on rivers, which also facilitated trade.

In the Eastern Mediterranean region, civil societies became prominent about the time writing was perfected and the highly devel-

oped material culture that accompanied it. Thus civilization is generally considered to have begun at the time of writing and the advent of the metals; but as the elaborateness and complexity of the preliterate cultures have come to be appreciated, it is realized that the distinction between civilization and primitive society is not so clear-cut as was once thought.

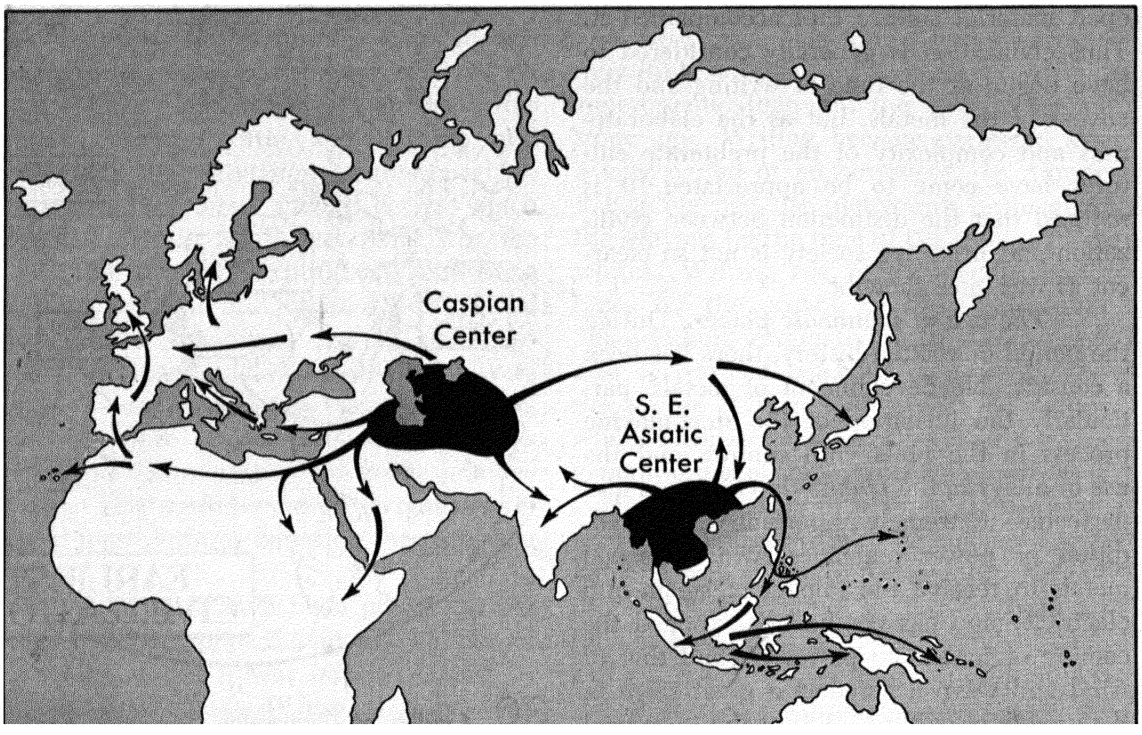
The age of inanimate power. During the period of written history, there has been a considerable development of metals, particularly the invention of the steel-making process in the nineteenth century and the use of alloys in the twentieth. Glass was also perfected. Extremely important was the addition of power machines, which needed metals to receive the impact of steam and electricity and gas combustion. Indeed the coming of inanimate power beyond that of wind and wave ushered in a great stage in the growth of culture. With it the Industrial Revolution succeeded the neolithic revolution, certainly two of the greatest revolutions in the evolution of the superorganic. Both revolutions brought vast changes in the social organization. With the Industrial Revolution came the magnification and multiplication of cities and the great plethora of social organization that accompanies large and dense populations. Both the neolithic revolution and the Industrial Revolution increased the spread of culture and superseded earlier cultures. Most important was the steam engine. Later came the internal combustion engine, the electric motor, and the atomic reactor. These engines were attached to moving as well as stationary machines. Manufacture by chemical processes is another kind of production. By industrial chemistry one substance is changed into another, generally without any great aid from power. Explosives, printing, the transmission of sound by wire and wireless, and air transportation are other additions to the superorganic during the historical period.



30 Cradles of Civilization

These early civilizations were the origin of that great social invention, the city. Its development depended upon food and transportation and hence these early cities were found in fertile valleys and on water routes. With these came the dense and large population. Military forces were needed to protect the food sources. There followed the weakening of the kinship organization of society and the strengthening of the civil organization, i.e., civilization. Comparable civilizations arose in Peru and Mexico but at later dates. Since this map was drawn, there has been reported the discovery of a city at Jericho near the Dead Sea that existed 8,000 years ago. The dating was by the Carbon 14 method and hence is accurate. (Map from Ralph Linton, *The Tree of Culture*, New York, Alfred A. Knopf, Inc., 1955, p. 297.)

The perspective of cultural evolution. The growth of the superorganic from simple beginnings far back in the animal world has been traced. A great turning point was the acquisition of language. When man became what he is now sometime during the later ice ages, another great step forward was achieved. By that time, though, culture had



31 Neolithic Origins and Expansions

The surface of stones was a negligible influence on the neolithic revolution. Nor was it a revolution, if we define revolution as a quick change of great significance. The neolithic revolution came slowly, but its impact was profound. It replaced the hunting cultures (except in isolated or harsh areas) with agriculture, domesticated large animals and larger communities. (Map redrawn from Carleton S. Coon, *The Story of Man*, New York, Alfred A. Knopf, Inc., 1954, p. 126.)

grown greatly in the things it could do. From the ice ages on, its growth has been very rapid indeed. Such a brilliant and marvelous history makes one wonder what the future may hold. The unfolding of the superorganic goes on. It has not stopped with our twentieth-century civilization. Cro-Magnon man with all his great mental ability, as he stood at the mouth of his cave looking out across the expanse of snow and ice, could not see what the 20,000 years ahead would show in the development of civilization. He could not have even imagined a fraction of the great inventions that have been mentioned in the preceding pages. Nor could Aristotle with all his learning have foreseen 2500 years ahead the chemistry, the engineering, the communication, and transportation inventions of today. What the superorganic will be like 20,000 years hence, or even 2000 years hence, is staggering to contemplate.

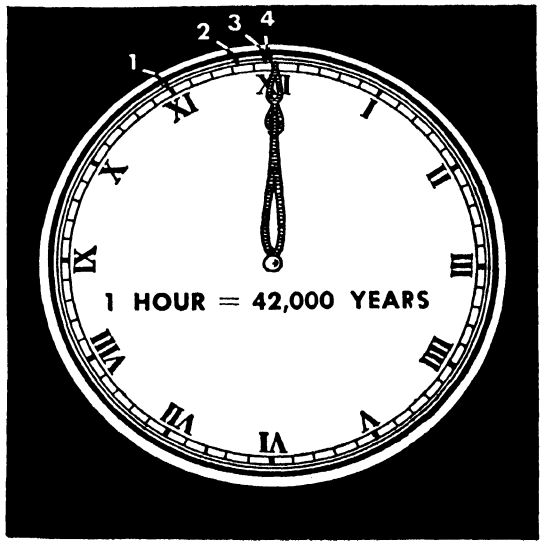
To help obtain an idea of the proportions of time required for the evolution of culture, geologic time can be scaled to the units of a great clock. Suppose the culture of the

Pithecanthropus of 500,000 years ago be placed at midnight, the time of the beginning of a new day, and our present culture at midday. Each hour on the clock then represents about 42,000 years. The Mousterian culture of Neanderthal man flourished about eleven o'clock in the morning, while the culture of Cro-Magnon man flowered about twenty minutes to twelve. There was a stretch of about eleven and a half hours of cultural growth from Pithecanthropus to Cro-Magnon. Several days must have passed since the superorganic was at the stage now possessed by the great apes, and weeks since its very early beginnings. The Greeks of the Golden Age of Pericles are only about three minutes away. A few seconds after twelve, noon, television may be so perfected that we can see what is happening at any spot on the planet. Our work may be done for us by robots in automatic factories. By five minutes after twelve the superorganic may have obtained a magnificence we do not even dream of now; and the mind of man is utterly unable to grasp what culture may be by the middle of the afternoon.

32 Clock of Antiquity

From midnight and Pithecanthropus to midday and modern man.

1. Eleven o'clock: Mousterian culture.
2. Twenty minutes to twelve: Cro-Magnon man.
3. Three minutes to twelve: The Golden Age of Greece.
4. Thirty seconds to twelve: Early beginnings of modern science.



THE INDIVIDUAL AND CULTURE

Is culture biologically determined? An important question concerns the relation of culture to the biological nature of man. Does man's inherited nature dictate the organization of the superorganic? Does his sex instinct dictate that in the superorganic there shall be a family? Does the biological nature of children determine that there shall be games to play? These question cannot be answered offhand. A tentative answer would be that our inherited disposition gives a general direction to the shape of the superorganic. Our sexual nature seems to indicate that there would be some kind of organization of behavior around the sexual activities. But, if so, the dictation is not invariable as to detail. There are many different kinds of families in the world: monogamous families, polyandrous and polygynous ones, family systems with and without divorce, families with concubinage, large family systems and small family systems. By looking at a thousand infants at birth in some international hospital it would not be possible to tell from their anatomy or from psychological tests on their behavior what types of families they would form, whether they would be monogamous or polygamous, stable or unstable. Such a prediction would be more reliable if we know in what cultures they would grow up; if we knew that one was to be a Mormon, another one of the polyandrous Todas, still another a Roman Catholic. From this illustration it appears that the superorganic, not the inherited nature of man, determines the particular social organization of the family.

The superorganic may be injurious to the organic. If the superorganic is a direct expression of man's inherited nature, then there should be no clash between culture and the biological needs of man. Some culture traits, however, are definitely harmful to the organic life of man. Thus some peoples in Southeast Asia eat polished rice with little other Vitamin B-1 and acquire as a result a definite disease of the nervous system known as beri-beri. If they ate wild or unpolished rice, the disease would disappear. They thus, through their social heritage, learn a habit that is definitely harmful physiologically. Learning often involves the discipline of native impulses, which are generally of biological value, or at one time were. Thus the bearing of children when the mother is young, but mature, is biologically appropriate. Yet many women postpone marriage or bearing children until late in life, well past the best biological period. This they do for various cultural considerations, for instance to learn a profession. The best biological age for marriage does not coincide with the best cultural age. So learning means inhibitions and control. The more learning there is the greater the opportunity for disciplining or modifying the natural expression of the biological impulses. There is a longer period of learning for the offspring of man than for any other animal. John Fiske called it the prolongation of infancy. In fact, man goes on learning all through life, although the period of greatest education is in infancy, childhood, and youth. There is abundant opportunity for the superorganic to modify the natural behavior of human beings.

The variety of customs for a single physiological function. That the tendencies to action of our biological nature may be variously trained is evidenced by the great variety of customs that exist around a particular physiological function, such as, let us say, anger.[20] The Crow Indians were a very warlike people; the Eskimos are peaceful. The Greek states almost fought themselves to death, yet during the modern age Greece has not been particularly engaged in war. In America, the English colonists fought with a patriotic fervor in their revolt against Great Britain, while some of the soldiers on the side of the British were Germans who fought for a wage. During the eleventh century, it was feared that Iceland could never be settled because of the rate at which the settlers were killing each other, but in the nineteenth century the murders in Iceland could be counted on the fingers of one hand. Fighting may occur among individuals spontaneously with loss of temper or heightening of emotion. On the other hand, it may be regulated rigidly by a code, as in dueling. Under this code a person may fight only another of his own class; with others he cannot fight no matter what the grievance or how intense the anger. The choice of time, place, and weapons is strictly regulated, and various assistants are appointed to conduct negotiations and to carry out the rules. In contrast, among gangsters in the modern city the approved method is for a small party to take the enemy out for a ride in an automobile, shoot him down without giving him a chance, then dump his body on the roadside.

Gangsters and vigilantes agree that certain offenses warrant death, but they do not have the custom of a trial by court. The family feudists prefer to fight out an issue rather than to bring it to court. Also there are persons who prefer to settle a dispute by fighting rather than to let the court handle it, particularly if it involves anything that may touch the reputation of women or some intimate family matter. Some societies consider fighting to be a manly virtue, a natural and at times necessary type of behavior. Many

[20] Lillian Eichler, *The Customs of Mankind* (Garden City, N.Y.: Nelson Doubleday, Inc., 1924); William Graham Sumner, *Folkways* (Boston: Ginn and Company, 1906).



33 Evidences of Lack of Harmony Between Biology and Culture

The best conditions for biological health do not always dictate the folkways. (1) The distortions of the Chinese foot, bound in infancy, a practice designating elegance in the Chinese culture. (2) The extreme distortion of the lips produced by means of disks in some cultures. (S. J. Holmes, *Human Genetics and Its Social Import,* New York, McGraw-Hill Book Company, 1936, p. 25.) (3) The modern high heel, which breaks down the arches. (4) The filing of the teeth dictated by fashion among the Philippine Negritos. (Loomis Havemeyer, *Ethnography,* Boston, Ginn and Company, 1929, pp. 104, 177.) (5) The American wasp waist. (6) When the Mangbetu child is only two days old, his head is molded into shape by the mother's fingers, and then for the next two or three years is bound until the shape of the skull is permanently distorted. (7) The heavy brass rings worn by the Maori woman impair the usefulness of the arms and the body. Which of these customs is least objectionable to you? to a Negrito? a Chinese? a Maori?

fathers go to great pains to teach their children how to fight. In other groups fighting is considered a type of rowdyism, close to the barbaric, that brings nothing but trouble and that does not help much in making friends, promoting sales, cooperating with fellow employees, or getting along with the boss. Passive resistance among followers of Gandhi in India was considered to be a great virtue. The Quakers also approve the idea of no physical resistance. Fighting is generally not considered proper among women. The impulses to anger are probably not greatly different in women from what they are in men, and temper has as much of a drive with females as with males.

Cultural behavior in regard to fighting shows great variations among different peoples over the world and also among the same peoples at different periods of history.[21] Original nature does not dictate any single type of fighting nor does it determine that fighting shall occur with any definite frequency, or indeed that it shall occur at all. Evidently the different cultures determine the details of how original nature shall behave in regard to pugnacity.

Folkways and Norms

Types of social behavior, if they are organized or repetitive, have generally been called customs. In a rapidly changing society there are many ways of acting that have not become sufficiently widespread or repetitive to be called customs. Such, for instance, is the wearing of trousers reaching only to the knee by adult men in the summer in the business center of a city. For such relatively recent and limited practices as, for instance, wearing sandals without stockings in summer, some term other than custom is needed, for customs are old. They might be called pseudo-customs or neo-customs, or, if ephemeral, fads. There are many kinds of customs, some of which are called manners, others etiquette. Some years ago an impressive book was written on customs with the title, *Folkways.*[22] Since then, "folkways" has become a common expression to designate customs. Sumner, the author, emphasized the variety of customs and their binding nature. They vary from society to society, from subculture to subculture, and from time to time in the same place. By "binding nature" we mean there is social pressure to make people conform to these folkways. We also call such folkways "norms." These two qualities Sumner expressed very forcefully, and the term folkways has since come to suggest variety and values.

The variety of folkways. The folkways of eating are interesting to consider, because of the biologically imperative nature of eating as contrasted with fighting. Eating is biologically necessary, while fighting may not be, although it seems to have been necessary for survival in the past. As regards eating, it is well known that the body system requires carbohydrates and fats for energy, protein for tissues, calcium and phosphorus for bones and teeth, iron for the blood, and many other acids and minerals. Among animals without appreciable culture the appetite is a good general guide to the bodily needs. When swine were offered a free choice of a variety of foods on a "cafeteria" system in separate containers, so that the pigs could eat as much of each as they wanted, the diet they chose was one that provided the necessary nutriments. The precise amounts needed, however, were not estimated.[23] Rats, when given a free choice, ate three times their optimum requirements of calcium and sodium chlorate and not enough vitamin A. As for human beings,

[21] Leslie White, "Culturological vs. Psychological Interpretations of Human Behavior," *American Sociological Review,* 12: 686–696, December 1947.

[22] Sumner, *op. cit.*

[23] E. V. McCollum *et al., Newer Knowledge of Nutrition* (5th ed.; New York: The Macmillan Company, 1939), Chapter 25.

Nacirema culture . . .

The Nacirema [spell it backward] peoples are a North American group living in the territory between the Canadian Cree, the Yaqui and Tarahumare of Mexico and the Carib and Arawak of the Antilles. Little is known of their origin although tradition states that they came from the east. According to Nacirema mythology their nation was originated by a culture hero Notgnihsaw, who is otherwise known for two great feats of strength — the throwing of a piece of wampum across the river Pa-To-Mac and the chopping down of a cherry tree in which the Spirit of Truth resided.

Nacirema culture is characterized by a highly developed market economy which has evolved in a rich natural habitat. While much of the people's time is devoted to economic pursuits, a large part of the fruits of these labors and a considerable portion of the day are spent in ritual activity. The focus of this activity is the human body, the appearance and health of which loom as a dominant concern in the ethos of the people. . . .

Every household has one or more shrines. . . . The focal point of the shrine is a box or chest which is built into the wall. In this chest are kept the many charms and magical potions without which no native believes he could live. . . . Beneath the charm box is a small font. Every day every member of the family in succession enters the shrine room, bows his head before the charm box, mingles different sorts of holy water in the font and proceeds with a brief rite of ablution. . . .

In the hierarchy of magical practitioners . . . are specialists whose designation is best translated "holy-mouth-men." The Nacirema have an almost pathological horror of and fascination with the mouth, the condition of which is believed to have a supernatural influence on all social relationships. . . . The daily body ritual performed by everyone includes a mouth rite. . . . which strikes the uninitiated stranger as revolting. The ritual consists of inserting a small bundle of hog hairs into the mouth along with certain magical powders, and then moving the bundle in a highly formalized series of gestures.

. . . Most of the population show definite masochistic tendencies. Part of a rite (performed only by men) involves scraping and lacerating the surface of the face with a sharp instrument. . . . Women bake their heads in small ovens for about an hour.

The medicine men have an imposing temple, or *latipso,* in every community of any size. The more elaborate ceremonies required to treat very sick people can only be performed in this temple. . . .

Our review of the ritual life of the Nacirema has certainly shown them to be a magic ridden people.

34 Body Ritual Among the Nacirema

(Excerpted, with the author's permission, from Horace Miner, "Body Ritual Among the Nacirema," *American Anthropologist,* 58:503–507, June 1956.)

newly weaned babies were offered a free selection of 35 foods, and are reported to have secured the variety necessary to supply their various chemical needs. In the list of 35 foods, however, sugar, cookies, candy and jam were not included, so it is not known what the choices would have been had these confections been included. There is also the question of whether the chemist conducting these experiments has measured precisely all the many acids, vitamins, minerals needed.

The experiment with the newly weaned children suggests that there is a "natural wisdom of the body" which is a reasonably good guide to the selection of a balanced diet. Yet people in many places show a variety of food preferences not based on positive food values. There is plenty of evidence of learned tastes for foods that are either harmful or of less value than others. Such are the tastes for tea, coffee, alcohol, tobacco, hashish, coco leaf, and betel nut. Occidentals prefer white bread, with the nutritive minerals and vitamins eliminated, to the whole wheat bread. Orientals prefer polished rice to the unmilled product. The products of the cow were not eaten in China. Cow's milk with its valuable properties is viewed with prejudice by some peoples, with much the same feelings we have about excretions. Horse meat is eaten in continental Europe, but not in the United States. Ants and insects are eaten by Indians in Brazil, but not in Europe and America, though snails are. Prejudices in foods bear little relation to food values, and are often quite irrational. A child may not eat a food because he does not like its color. Since individual prejudices in regard to food are so irrationally formed and have so little reference to food merits, it is easy to see how social prejudices in regard to foods could arise and be fixed into customs. Primitive people do not kill the animal that is the totem for the clan, for instance the turkey, though it be a very good food, even though other food in the vicinity is scarce.

Culture has a way of setting up different customs in regard to fundamental biological behavior such as eating and fighting. The same wide variety of folkways is shown in other activities, such as those clustering about marriage, birth, death, sex, kinship, worship, labor, trade, production, dress, and art. Some knowledge of this variety of customs can be had by reading a book on customs, such as Sumner's. The educational value of such reading is not unlike that gained by travel. The individual who has never been out of the country is likely to think that the customs of his neighborhood are the only ones and the best ones. A visit to the big city or to other lands shows that there are other customs than our own and that they may be just as good, though some of them may be worse, from the viewpoint of biological welfare. Many varieties of the superorganic are possible. One cannot take a blueprint of our inherited traits and read off therefrom the structure of the social institutions and customs. Blurred outlines of the major parts of culture and its limits may be seen, but the native impulses are not a guide to particular customs.

Norms and the binding power of customs. Some practices we follow automatically, such as putting on our shoe on the right foot first. There is no compulsion by society to observe such a practice. Many employers and employees commute long distances from their places of work. There is no social pressure to impose this "folkway" on the inhabitants.

On the other hand, there are very many customs that members of the community wish us to follow. Such, for instance, is the removal of hats, especially if they be large ones, in theaters. Such a practice is called a social norm. A social norm is thus a type of social behavior that is socially valued and a departure from which is socially con-

PER CENT OF CULTURES CONTROLLING	KIND OF BEHAVIOR
100	eat, vocalize, talk, coitus, incest, give, marry, be formal, be named, mourn, harm others, harm self
96	enter, clothe self, steal, mutilate self, murder
92	adultery, in-law incest, take, cleanse self, touch, work
88	suck, drink, hinder food quest, pollute food
80	look, respect others, name others, protect self
76	sleep, help others, be intimate, protect others, kill animals
72	urinate, premarital coitus, obey others, purify self, seclude self, disrespect others, insult others, mutilate others without pain
68	approach, clothe others, punish others
64	avoid retaliation, hinder manufacturing, defecate
60	cannibalism, wail, cry, pay others, cure self, hunt, fish, till, etc.
56	sit, cleanse others, be angry
52	inhale, sing, be hospitable, conceal self
48	learn cowardice, assume prerogatives, quarrel, play, invite bad luck
44	spit, prepubertal coitus, dance, ornament self, cure others, express grief, bewitch others, fight, punish self
40	smoke, massage, facilitate delivery, teach others, disobey others, be obscene
36	chew, perspire, conceive, walk, be lazy, induce barrenness, be friendly, pacify others, deceive others
32	consume narcotics, vomit, rape, thank others, conceal genitalia, carry, confess guilt, accidental homicide, abortion, infanticide, manufacture, destroy goods
28	bite, flatus, marital coitus, step on, point, divorce, induce fertility, purge self, exhibit bravery, anger others, kill self
24	dream, suckle, betrothal adultery, remain, avoid, hear, hinder delivery, express pain, hinder war, aid food quest, violate mores and taboos
20	lick, whistle, sodomy, lie, accompany, be greedy, be independent, be kind, transvestitism, increase breast milk, purify others, confine self, betray others, commit treason
16	cough, prostitution, stand, grasp, scratch, fear, discourage sucking, ornament others, ridicule others, mutilate others
12	eat condiments, kiss, sneeze, whisper, laugh, homosexuality, run, be dignified, remove breast milk, greet others, ask permission, atone for crime
8	become intoxicated, shout, think, masturbation, extramarital coitus, seduction, bestiality, crouch, jump, be jealous, be sex greedy, be just, warn others, plunder, arson
4	taste, smack lips, sniff, grimace, tremble, stretch, sleep walk, sleep talk, give birth, abnormal sexual practices, faint, exhibitionism, crawl, swim, climb, tickle, hand-clapping, wink, hate, be obstinate, be sulky, be irresponsible, be dependent, be loving, be industrious, be thrifty, encourage sucking, beg pardon, exhibit disgust, boast, frighten others, be frightened
0	salivate, belch, hiccough, breathe, flush, blush, shiver, yawn, menstruate, nocturnal emission, sadism, masochism, kick, blink, be curious

35 Acts of Behavior Controlled by Twenty-Five Different Cultures

(Adapted from C. S. Ford, "Society, Culture and the Human Organism," *The Journal of General Psychology,* 20:167–68, January 1939.)

demned. If the norms are valued highly, then the deviants therefrom may be punished severely, as by ostracism, fines, or imprisonment. There are dinner parties to which a costume featuring a white tie and a coat with long tails must be worn by the men. At a state dinner an ambassador must be seated closer to the host than a minister, and the minister may not precede an ambassador in entering the dining room. In old New Orleans unmarried girls could not go to a party attired in a colored dress. It must be white. Customs are often followed with less deviation than are laws or the Ten Commandments.

How widely a culture regulates behavior through the medium of the group is shown in the following list of acts that are controlled in twenty-five different cultures of preliterate peoples.

Figure 35 shows how widely the biological activities of the human animal are regulated as a price of his living in a group and having the advantages of a culture. The very limited cultures of dogs or monkeys make no such demands on behavior. The advocates of complete freedom of action of the individual will peruse this list with interest.

Norms, like many customs, change. Thus the norm of a man removing his hat in the presence of women in an elevator is beginning to disappear. Norms vary from country to country. Thus in many cultures where food is scarce, belching after a meal is expected as a method of showing appreciation. It does not exist in the United States. Social norms are then aspects of the relation of culture to the individual. A fashionable woman must wear a high-heeled shoe even though it breaks an arch in her foot. The medium through which culture thus affects the individual is the group.

There are some norms upon which a very high evaluation is placed. Such, for instance, is monogamy in modern society. These very highly esteemed norms Sumner called *mores,* the Latin word for customs. The mores have the same cultural pattern as the folkways except that deviations therefrom are considered to be much more serious. Since a consideration of the mores shifts the emphasis from culture to the group, they will be considered in a later chapter on Social Control.

SUMMARY

This chapter has shown that there are two distinct ways in which the behavior of organisms may be determined, (1) through heredity, and (2) by learning from the group. In the case of man, heredity contributes such behavior as sucking, swallowing, and blinking, while behavior like talking English, wearing a felt hat, and driving an automobile is learned from others. The processes involved in the acquisition of these two types of behavior are fundamentally different. The first is a biological process of transmission by means of the fertilized egg; the second is a psychosocial process, involving transmission by means of a system of communication, based on the capacity of man to learn.

Behavior transmitted by learning from one generation to another is called culture. The beginnings of social learning and culture are to be found far back in the animal world, but the absence of speech, even among the higher apes, limits greatly the amount of the acquisition. Man alone has a substantial culture.

Man did not always have a culture as rich and complex as the one he now has. Starting hundreds of thousands of years ago with practically no material culture — that is, with sticks and cracked stones, and with relatively little non-material culture — man has achieved the amazing technology and social organization he now enjoys. The evidence of growth has been presented in this chapter to show how culture has come to

assume the commanding place it occupies in human experience. Culture touches and affects man's life in numerous significant ways, as will be shown in subsequent chapters.

A culture consists of inventions, or culture traits, integrated into a system, with varying degrees of correlation between the parts. A useful classification of parts is in terms of material and non-material culture. It is the material culture that looms large in our day; it is changing most rapidly and forcing the other parts of the superorganic, such as family life and religion, to make adjustments to it. Both material and nonmaterial traits, organized around the satisfaction of the basic human needs give us our social institutions, which are the heart of a culture. The institutions of a culture are interlinked to form a pattern which is unique for each society.

The transmission of the social heritage could not take place without the continuity of life and the capacity for learning provided by heredity, but culture itself is only in a very general way an expression of the inherited nature of man. Heredity sets limits and indicates broad trends, but does not dictate the details of culture. If culture were a direct expression of man's biological nature, then culture would be in complete harmony with biological nature. But evidence has been given to show that there are many harmful customs in different cultures. Moreover, a great variety of customs, often contradictory from one culture to another, exists for a given physiological function, like anger or eating. These established customs, or folkways, regulate the biological activities of man and dictate how he will behave. Particularly binding are the mores, customs that are regarded as essential to group welfare. The superorganic is, then, an order of phenomena different from the organic and goes its way with a certain amount of independence from the organic.

QUESTIONS FOR DISCUSSION

1. What are the implications of the statement that Aristotle was the last man to be acquainted with all the culture of his time?
2. How valid is the suggestion that characterizing man as *homo sapiens*, the thinking animal, is less appropriate than describing him as *homo loquens*, the talking animal?
3. What is the significance of the fact that man alone has a substantial social heritage?
4. What is the justification for giving space in this chapter to a description of the Eskimo culture?
5. The polar bear has developed a shaggy coat as a protection against the cold, but the Eskimo who occupies the same region is not enveloped in heavy hair. How does the Eskimo adjust to the cold environment? In what ways is this type of adjustment superior to biological adaptation? In what ways inferior?
6. Folkways vary from place to place, and from time to time in the same place. What is the importance of this?
7. How do social norms develop?
8. What is the effect of rapid change on the folkways?
9. How does culture aid, and hinder man in his adjustments?
10. How can you show that customs are not dictated by man's biological nature?

TOPICS FOR REPORTS

1. The case for and against the presence of culture on the subhuman level.
2. Biological factors in the evolution of culture.
3. Changes in American social norms in the last century.
4. The social organization of ants and bees.
5. The sociology of knowledge.
6. A. L. Kroeber's concept of the superorganic. "The Superorganic," *American Anthropologist* (N.S.), 19:163–213 (1917); "The Possibility of a Social Psychology," *American Journal of Sociology,* 23:635–50 (1918).
7. William Graham Sumner, *Folkways.*
8. Ralph Linton, *The Tree of Culture.*

SELECTED READINGS

COON, CARLETON S., *A Reader in General Anthropology.* New York: Henry Holt & Company, 1948.

An excellent description of a hierarchy of contemporary preliterate cultures arranged in order of complexity.

FREUCHEN, PETER, *Arctic Adventure.* New York: Farrar and Rinehart, 1938.

This true tale of adventure will serve as an introduction to the Eskimo, whose material culture is much like that of the Magdalenian people of the last ice age in Europe. It should be followed by other books such as Franz Boas, *The Central Eskimo* (6th Report, Bureau of Ethnology), and E. W. Nelson, *The Eskimo About Bering Strait* (18th Report, Bureau of Ethnology). Popular accounts are Knud Rasmussen, *The People of the Polar North,* and V. Stefansson, *My Life with the Eskimo.* The student would do well to choose some one primitive culture and endeavor to become especially well acquainted with it. For the Melanesians, see the excellently written books of Malinowski. The Australian aborigines have been written about a good deal by N. W. Thomas, Spencer and Gillen, Howitt, Roth, and Warner. A. R. Radcliffe-Brown has an excellent book on the Andaman Islanders, and Robert H. Lowie is an authority on the Crow Indians.

HOWELLS, WILLIAM, *Mankind So Far.* Garden City, N.Y.: Doubleday & Company, Inc., 1945.

A lively account of early man but not of his culture.

KROEBER, A. L., *The Nature of Culture.* Chicago: The University of Chicago Press, 1952.

Fifty selected papers, written from 1901 to 1951, representing a lifetime of close study of the phenomenon of culture.

LINTON, RALPH, *The Study of Man.* New York: Appleton-Century-Crofts, Inc., 1936.

This book does not deal with culture as the superorganic. But it is a well-organized presentation of the relation of the group to culture and of the concept of the culture of an area. In his later (1945) *The Cultural Background of Personality,* he is less successful in relating culture to personality, but nevertheless the book is well worth reading.

MURDOCK, GEORGE P., *Our Primitive Contemporaries.* New York: The Macmillan Company, 1926.

This brief description of a variety of preliterate cultures has furnished illustrative material for the analyses and discussions in the text.

SUMNER, WILLIAM GRAHAM, *Folkways.* Boston: Ginn and Company, 1906.

One of the great books on sociology; great because it has exercised so profound an influence in showing (a) the power of customs and (b) the variability of moral codes. There is a wealth of illustration.

WALLAS, GRAHAM, *Our Social Heritage.* New Haven, Conn.: Yale University Press, 1921.

The first few chapters give a readable exposition of the concept of social heritage, without the usual emphasis on primitive culture.

4

The Contribution of the Biological Factor

The society which carries our culture and which shapes the personality of children is a society with characteristics that are peculiar to the species from which man evolved. Men are less gregarious than sheep and more gregarious than cats. They cannot smell as well as the moth or hear as well as the bat. They do not have the bee's sense of time nor the pigeon's sense of direction. Hence the capacities of man, the animal, set lower and upper limits to the culture he carries. If man had a collection of capacities like those possessed by the ant, the dog, or the cat, his social order, his family, his music, his entertainment would be different. Human biology gives man the setting of his culture as truly as do the rivers, valleys, or mountains. We want to know what that setting is.

We have been writing as if men did not differ, but Tom, Dick, and Harry are really not alike. Tom had to wear glasses from childhood, while Harry has perfect vision. Leonardo da Vinci had a brilliant mind with which he accomplished wonders. Others have such low intelligence that they must be committed to institutions. So it is natural that sociologists should speculate on how much better the world would be if it could be peopled only by the best.

In trying to answer that question, the sociologist turns naturally to the biologist for reasons why man is man and not an ape. The sociologist asks the biologist how man has evolved from the anthropoids and whether he may evolve still further into a superman. Would the society of such supermen, the sociologists wonder, be better than our present society?

THE ANIMAL BASIS OF CULTURE

Does our biological inheritance determine the outline of our culture? Our society has many animal functions. We must eat; and, like all other animals, we spend much time getting and preparing food. Like the higher vertebrates we sleep, procreate, and train our young.

While we are like all other animals, we also differ from them; we are more like the apes than we are like cats, canines, or cattle. Indeed it might be said that we are simians but with a very large brain and the ability to talk. Our society has certain characteristics due to inheritance from this particular biological species, *homo sapiens.*

What some of these characteristics are may be inferred by contrasting them with what our society would be like if we had not been descended from anthropoids but had evolved from cats. Suppose the big cats had developed a big brain and the ability to talk, what would the society of such supercats be like? Clarence Day, a man of letters but not a biologist or a sociologist, has tried to imagine such a society. From his account we present some selections which indicate as Mr. Day sees them — in a purely imaginary way, of course — the biological contributions to society.

A race of civilized beings descended from these great cats would have been rich in hermits and solitary thinkers. The recluse would not have been stigmatized as peculiar as he is by us simians. They would not have been a credulous people, or easily religious. False prophets and swindlers would have found few dupes. And what generals they would have made! What consummate politicians. They would have been strong at slander, they would have been far more violent than we in their hate, and they would have had fewer friendships. . . . The super cats would have rated cleanliness higher. . . . J. de Courcy Tiger would have felt that nothing but making soap or being a plumber was compatible with high social position and rich Vera Pantherbilt would have deigned to dine only with manicurers. None but the lowest dregs of their race would have been lawyers spending their span of life on this mysterious earth studying the long dusty records of dead and gone quarrels. We simians naturally admire a profession full of wrangle and chatter. But that is a monkeyish way of deciding disputes, not a feline. . . . In a world of super-cat-men I suppose there would have been fewer sailors, and people would have cared less for sea-side resorts, or for swimming. . . . Among them there would have been no anti-vivisection societies, no vegetarians, no early closing laws, much more hunting and trapping, no riding to the hounds, that's pure simian. They would not have knighted explorers — they would all have been explorers. . . . They would have had few comedies on their stage; no farces. Cats care little for fun. In the circus, superlative acrobats, no clowns. In drama and singing they would have surpassed us probably. Even in the stage of arrested development as mere animals, in which we see cats, they wail with a passionate intensity at night in our yards. Imagine how a Caruso descended from such beings would sing. In literature they would not have begged for happy endings. A super-cat artist would have valued the pictures he drew for their effects upon himself; he would not have cared a rap whether anyone else saw them or not. . . .[1]

[1] Reprinted from *This Simian World* by Clarence Day by permission of Alfred A. Knopf, Inc. Copyright 1920 by Clarence Day.

Mr. Day's amusing fantasy raises quite a question. Does our animal inheritance dictate the type of behavior we engage in? Certainly not the way it does in the case of bees and ants whose pattern of acting for a single species is relatively unvarying. A chicken will peck on the ground for food as soon as it is hatched, but a human baby is quite helpless, without assistance.

Man's predispositions are less fixed. The coordinations of the nervous and muscular system are incomplete at birth. Previously we have said that man differs from other animals in his large brain and in his ability to talk. We also add to these two, a third characteristic, his greater ability to learn, which rests upon the fact that his nervous system is less completely coordinated at birth.

Though man's learning capacity is great, the heredity of his species sets limits. He cannot hear the ticking of a watch at forty feet as can a dog. He cannot learn to breathe in water as a fish with gills can.

Man's culture, which is the accumulation of his learned ways of behaving, is related to his animal capacities, even though his ability to acquire different habits is very great indeed. We think the culture of super-cats would be different from the culture of super-simians because the super-simians and the super-cats would have different animal potentialities and limits of behaving. We are probably partial to stairs rather than ramps because we are bipeds; ramps suit quadrupeds better. So, too, if man were a furry animal, he probably would never have invented clothes, or even the bath tub.[2]

While the culture of super-simians differs greatly from what a culture of super-cats would have been, because of the difference in animal inheritance, it is not to be inferred that the culture of all the super-simians of the same race and kind will be identical.

[2] Ralph Linton, *The Study of Man* (New York: Appleton-Century-Crofts, Inc., 1936), Chapter 9.

The reason is that men, the super-simians, can learn widely different activities and are capable of adapting to greatly varying situations. The human hand for instance can move a pencil, play a piano, paint a picture, shoot a gun, guide a plow, swing from a limb, or scratch an itching skin. In one culture it learns to guide a plow but not to play a keyboard. The hand learns to do many different things in different cultures, and is equally well adapted to doing each. Biological inheritance does not dictate any one of these activities. On the other hand, biology does dictate that the hand is not as well adapted to running over land as a horse's hoof, nor to moving the body through water as a fish's fin.

The culture of the Scandinavians with its cities and factories is very different from their culture two thousand years ago with its hunting and crude methods of agriculture. Yet the Scandinavians are biologically the same people now as then. However, 2000 years ago the Scandinavians had many cultural characteristics similar to those of today. They lived in groups, had leaders, married and reared children, and spent much time in getting and eating food. Even though cultures vary, everywhere there are universals. Men quarrel, love, associate, and procreate no matter what the culture, though the methods of doing these things vary. Also, some kinds of activity are found very rarely. Thus in only a few societies is a large percentage of the adult population unmarried. Only very rarely does a society cripple the feet of its members.

There are traits common to all cultures. Interest has frequently been shown in activities that are found in every known society, present or past. Such activities have been thought of as biologically determined, since they are found everywhere. But this need not be so. Language is found everywhere, yet a group of children growing up from birth without others speaking a language, would not themselves have a language. A language is learned.

A list of activities common to all societies, whether existing now or in the historical past, is valuable information. It indicates the great utility of these activities and also suggests that they are practices to which man is well adapted and for which he has a need. We also wonder whether we can get along without such universals. Murdock has compiled a list based upon an inventory of all known cultures. Such a list could not have been compiled without countless hours of labor by field workers all over the world and extending over centuries. The list is shown in Figure 36.

The customs, practices, and activities shown in Figure 36 are arranged alphabetically and hence appear miscellaneous; but they can be grouped in various ways, as around social norms, activities found or not found among apes, or the customs of social institutions. A large number appear to be only remotely related to what we generally think of as biological factors, as, for instance, interest in cosmology, or eschatology, or magical practices, though many may be grouped around bodily functions, such as sports, obstetrics, sexual restrictions, weaning, hygiene, and modesty.

To summarize, the biological contributions to society may be thought of as two. One is to set limits to cultural behavior and the other is to favor certain types of behavior to which man's biological nature is better adjusted than others, and to develop very rarely those activities which are inimical to individual adjustment to environment. While our biological nature does not dictate all details of our culture, it does show a preference for certain types of activity and it sets limits on others.

Is the tendency to live in groups inherited or learned? Of the many different biological bases of human society, one that especially interests sociologists is the tend-

SOCIAL PRACTICES FOUND IN EVERY CULTURE

age grading
athletic sports
bodily adornment
calendar
cleanliness training
community organization
cooking
cooperative labor
cosmology
courtship
dancing
decorative art
divination
dream interpretation
education
eschatology
ethics
ethnobotany
etiquette
faith healing
family feasting
fire making
folklore
food taboos
funeral rites
games
gestures
gift giving
government
greetings
hair styles
hospitality
housing
hygiene
incest taboos
inheritance rules
joking
kin groups
kinship
nomenclature
language
law
luck superstitions
magic
marriage
meal times
medicine
modesty concerning natural functions
mourning
music
mythology
numerals
obstetrics
penal sanctions
personal names
population policy
postnatal care
pregnancy usages
property rights
population of supernatural beings
puberty customs
religious ritual
residence rules
sexual restriction
soul concepts
status differentiation
surgery
tool making
trade
visiting
weaning
weather control

36 Social Practices Found in Every Culture

(From G. P. Murdock, "The Common Denominator of Cultures," in Ralph Linton, ed., *The Science of Man in the World Crisis*, New York, Columbia University Press, 1943.)

ency to live in groups. This tendency has been called the gregarious instinct. Such instincts are found in sheep and other animals that herd together. Instinct leads to quite complicated behavior patterns as in the case of birds who build nests without having watched other birds do so. But among human beings the habit of referring to complicated patterns of behavior as instinct has been abandoned for the reason that man's behavior is not fixed very definitely by heredity and maturation, but becomes definite only through learning.[3] The houses one man may build vary more than the nests of a bird. So instead of referring to instincts, as in the lower orders of animals, in the case of mankind we speak of inherited tendencies or predispositions.

That heredity is a factor in gregariousness we infer by comparing certain carnivores, as for instance cougars, with certain herbivores, such as caribou. The societies of caribou are great herds often numbering many thousands while the cougars live in small family groups. The supply of meat for the cougars necessarily determines that their numbers in a group will be small, while the vegetation permits large groups of caribou. Yet there are group responses peculiar to each. A thousand cougars put on the plains where there is plenty of food would behave differently from a thousand caribou, and the behavior of three or four caribou in the jungle would not be the same toward each other as

[3] L. L. Bernard, *Instinct: A Study in Social Psychology* (New York: Henry Holt & Co., 1924).

would be the case with three or four cougars. Man is most closely related to animals who can eat either meat or plant food, and who live in groups larger than those of cats but smaller than herds of cattle.

The hereditary structure peculiar to gregariousness is not as obvious as is the fact that the stomach is the seat of hunger and the glands the seat of sexual desire, though contributory factors to hunger and sex do come from various other inherited structures such as the heart and the nervous system. The absence of any obvious hereditary structure for gregariousness is not an indication of the absence of inheritance. There is in the case of nest-building by birds no single biological structure peculiar to the making of nests.

Gregarious activity is highly varied and involves the approximate range of our biological inheritance — as for instance, the nervous system, the glands, and the circulatory apparatus. Gregariousness, if defined more fully, is seen to involve human interaction (including the intellectual activities and the emotional) in the elaborate activities we call sociability. Gregariousness is basically a response to the stimuli of other persons, which actually means responding in a great many different ways to stimuli involving love, hate, ambition, fear, the opinion of others, etc. Our responses to persons are much more varied and numerous than the few ways in which we usually respond to, say, a fire or a tree. Gregariousness involves memory and the organization of personality we have built up around the idea of self.

We learn to react to others. Even in very early infancy we respond to a mother's warmth, pressure, touch, and smile, and later to her words with their delicate gradations of sound. Thus we learn to respond with love, hate, fear, and admiration to particular persons in particular situations. While these responses are learned, there are inherited predispositions, that is, structures that tend to behave in one way more than another. For not all animals can learn such rich and varied responses as can man. The social responses of the dog are more limited; even more limited are those of the cat. Birds are much less responsive in learning, though a bird can learn to modify its song when it hears other birds sing. Upon this remarkable hereditary gift of social potentialities to *homo sapiens,* human societies are built.

Though mankind differs from felines, canines, equines, and other animals in the hereditary capacities, so far as we know there is no hereditary variation of gregariousness among peoples. There is no known evidence to make us think that the Chinese, for instance, are not as sociable as the Europeans. How much hereditary variation in this capacity there may be among individuals we do not know. It may be that there is very little; just as there is very little difference, if any, among normal individuals in their ability to speak a language. Any child without defect can learn to pronounce the words of any language, if he begins early enough. If this is the situation, then the degree of sociability of an animal of the human species is largely a matter of learning and experience.

On the other hand there may be some hereditary variation in the anatomy of man underlying sociability, though such variation seems rather difficult to prove. For instance, it is said that those with relatively large roundish bodies are more inclined to sociability than those with narrow chests and slender trunks, who, it is claimed, are less good at mixing with their fellow beings.[4]

We conclude then, on gregariousness, that human society is based upon animals that inherit great capabilities for social interaction, and it is this inheritance that makes our

[4] W. H. Sheldon, with the collaboration of S. S. Stevens, *The Varieties of Temperament* (New York: Harper & Brothers, 1942).



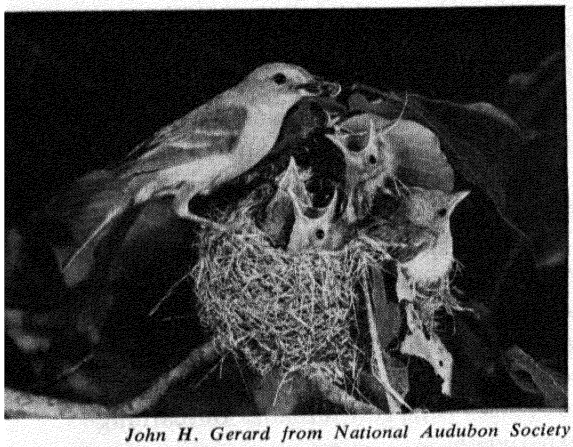
Hal H. Harrison from National Audubon Society



Eric Hosking from National Audubon Society

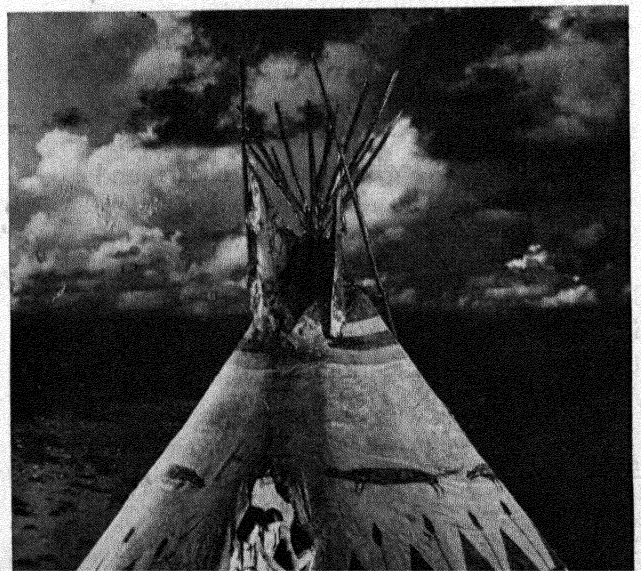
37 Nests, Houses, and Learning Capacity

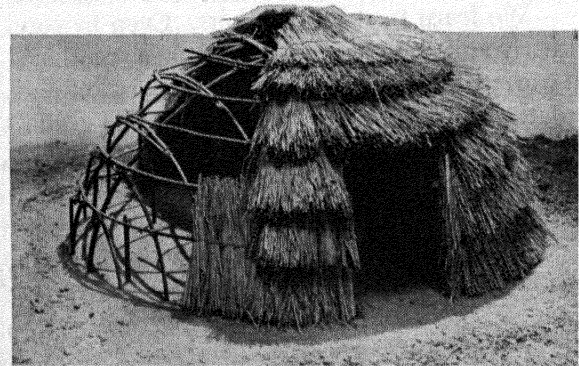
The nests of the oriole show little variation in pattern, whereas human habitations vary considerably. Nest-building is more largely governed by biological factors, home-building by cultural factors. Man's greater learning capacity is also evidenced in his more varied and complex social behavior.



John H. Gerard from National Audubon Society







rich social life possible. This indebtedness to our animal ancestry for our ability to learn from and respond to others in a great variety of ways is common to all large groups of mankind, and there is no known evidence that one race or people inherits a greater capability for social interaction than another.

THE ADJUSTMENT PROBLEM

The idea of adaptation. The idea of adjustment to environment was stressed by Charles Darwin, and the term *adaptation* is widely used in biological literature. Darwin based his theory of change from one species to another on the fact that the adjustment was better for animals with a certain type of color or a particular size and that those with a different color or size died sooner or in larger numbers. Thus nature selected a certain type of variation for survival. Those that were maladjusted to environment did not live. All through nature, there is an adjustment between the animal or plant and the environment. The polar bear is adjusted to the arctic and not to the tropics.

Man the animal lives in all of the zones of the earth and in every continent. Therefore we infer that, with the aid of his inventions, he is in general adjusted to his natural environment. One test of adjustment is survival and one test of maladjustment is death. These are extreme tests. What we need is a more refined measure of adjustment, one that will indicate degrees of adjustment between such extremes as life and death. Thus a man may live in different occupations or communities, but he may be better adjusted in one than another as measured, say, by health, or nervous strain. Robert Louis Stevenson lived in England and Samoa but was better adjusted physically in Samoa.

There are not only degrees of adjustment but there are degrees of strength in man. Some are never ill and some are sick much of the time. Many Englishmen may be as well adjusted in England as in Samoa. There are also degrees of difference in cultures. The cities of the Middle Ages with their narrow streets, open sewerage, and fire hazards were different from our cities with modern plumbing, quarantine service, and fast moving vehicles. When we speak of the adjustment of biological man to his culture, we are not dealing with two unvarying entities, but with two variables, units of each of which are often widely different from one another.

The adjustment of culture to man the animal. We wish in this section to consider only one of these variables, culture, and to consider this cultural environment not in connection with different kinds of men, the tall and the short, the weak and the strong, but with a sort of generalized average man, thus eliminating the variation of the biological variable. So we may ask: is the average biological man — man the animal — as well adjusted to modern civilization as he was to the cave life of the hunter and food-gatherer? We do not propose to answer this question here, but rather to raise it as one of the persistent problems when we are considering the contribution of the biological factors to the study of sociology. The question naturally arises as to what kinds of societies are best adjusted to average biological man. In a later section we shall raise the question of improving the quality of biological man so that he may be better adjusted to modern society. But in this section we are concerned with the question of changing society to fit biological man. The material of the chapter, then, may be organized around the conception of adjustment between biological man and his cultural environment.

The idea of adjustment is more common to biological than to sociological literature. But we use in sociology the term social disorganization; and measures of the health of a community imply the idea of adjustment

as do insanity rates and birth rates. Lack of adjustment is also implicit in war and in violent revolution and in serious crimes, though not necessarily biological maladjustment. The sociologist Hobhouse has used the idea of harmonious relationship as we are here using the word adjustment.

What is good adjustment? In biology there is a simple objective test for lack of adjustment, namely, death, about which all may agree. But in sociology we do not always agree on what is good adjustment. For instance, is a student who spends ten hours a day studying in the stacks of the library better adjusted than the college athlete? We will answer this question differently according to our particular system of values. There are, however, many conceptions of adjustment on which most people will agree. Thus those who become neurotic, nearly all would agree, are not well adjusted to culture, although some would claim that the neurotic is well adjusted but the others are not — like the mother who observed her young soldier son marching and remarked that all were out of step but Johnny. However, where there is a high accident rate or sickness rate in an industrial plant, most persons would have the same value system and say that there is lack of adjustment.

Then, too, a culture may be well adjusted to some of the biological capabilities of mankind but not to others. Mozart, who died young, was well adjusted to the musical world. Sparta may have been better adjusted to the physical man than Athens, while Athens may have been better adjusted to man, the thinker.

Biological man as a standard. Not all persons would agree that a proper goal is to adjust culture to biological man. Herbert Spencer said that the first requisite is to be a good animal, and that education in health has a priority over all other types of education.[5] Many religious persons would place moral goals before biological ones, and would not agree with Spencer that the first need of man is to be a good animal. Even Spencer never married. A hungry man suffering from malnutrition may need adequate food, but that need, biological though it may be, does not permit him to steal food and thus break the commandment, "Thou shalt not steal."

To emphasize biological standards does not necessarily mean to de-emphasize other values. Rather, improved biological adjustment is often correlated with improved economic and other social adjustment, as Figure 38 indicates.

Society has its codes of conduct which are not always in conformity with biological needs. For instance, a proper biological age for marriage is probably in the early 'teens, but the best cultural age for marriage is probably in the fifties or sixties — an age that would presumably give us the wisdom to meet the problems that harass a modern family. We compromise by marrying in the early twenties. The chimpanzees mate very early. But shall we set the conduct of the chimpanzee as the goal of human conduct? Some social standards work for complete biological maladjustment, namely, the death of the individual, as in the case of war, or capital punishment for crime.

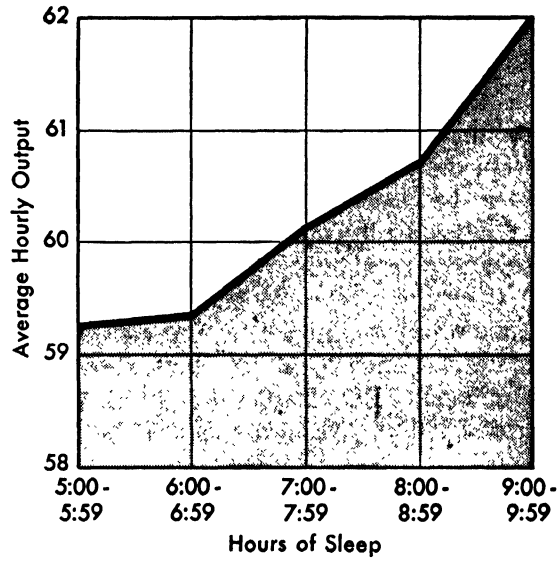
Cultures have sometimes been very much maladjusted to biological man. Thus, the flagellants were a group whose purpose was to punish the body by sleeping on a bed of nails or taking a pilgrimage with pebbles in the shoes. Asceticism as a cult has existed in widely different parts of the world and in different ages. An extreme doctrine of the ascetics is found in the document of the thirteenth-century Hali Meidenhad.

> The aim of the book is to persuade women to renounce marriage. Marriage is servitude. God did not institute it. Adam and Eve introduced it by sin. Our flesh is our foe. Virginity is heaven on earth. Happy wedlock is rare. Motherhood is painful. Family life is full of

[5] Herbert Spencer, *Education* (London: Williams & Norgate, 1911).

38 Biological and Occupational Adjustment

In the experiment described in the accompanying figure, production of telephone relay assemblies increased with increase in hours of nighttime sleep. The output is an average of averages for five operators. We can sacrifice biological values for economic, recreational, religious, or other values, as when people neglect their health to achieve economic success, or to have a good time, or to devote themselves to humanitarian causes. But there are limits beyond which we cannot go without so injuring health as to jeopardize social activity. (C. E. Turner, "Test Room Studies in Employee Effectiveness," *American Journal of Public Health*, 23:577–584, 1933.)



trials and quarrels. Virginity is not God's command but his counsel. Marriage is only a concession. This was the orthodox doctrine of the time. Among the religious heroes of the age not a few were irresponsible from lack of food, lack of sleep and the nervous exhaustion they forced upon themselves by ascetic practices.[6]

Asceticism does not flourish today as it once did. But there are many social practices today that are not in conformity with good animal criteria. Our clothes are not always well adapted to our anatomy, as for instance shoes; nor to body temperature, as for instance heavy clothing in summer. Only a very small percentage of the population of modern cities in the western world reach the age of thirty without broken arches in their feet or twisted toes or growth protuberances. We have worked children in factories fourteen hours a day. And the world often applauds a man for making a great success even though his health breaks down in doing so.

Some of our social practices could be made to conform to biological needs without a great deal of difficulty, as is the aim of dress reform and some factory legislation. In other cases the task is difficult. For we could not have social life without restraint and repression of natural impulses, such as those implied in the Ten Commandments. In these cases there arises the problem of how to apply the general principles of moral law in a given concrete situation, and where to draw the line between healthy restraint and the repression that destroys reason.

Though we may have difficulty in defining good adjustment between biological man and culture, yet it is desirable at all times to consider our biological needs, no matter what action is taken or whether we agree on a biological priority. For nature, as well as culture, is an environment to which man the animal must have a measure of adjustment. Since our society is a society of biological beings, we may ask if man exists for his culture or if his culture exists for him.

What our biological needs are can best be learned in books on physiology and psychology. How to help change our culture so that it will be better adjusted to our biological heritage is one of the problems discussed in this book. Many of the chapters which follow will deal with issues that relate to such a program.

[6] William Graham Sumner, *Folkways* (Boston: Ginn and Company, 1906), pp. 621, 622.

THE QUALITY OF MEN

In the previous section the improvement in the adjustment between mankind and cultural environment has been discussed from the point of view of changing the culture. In succeeding sections we wish to look at adjustment from the point of view of changing mankind.

If men were all alike and were always the same, there would not be any possibility of modifying man to fit him better to his environment. But human beings differ one from another. We next consider their variation.

Differences between individual men and women play an important part in social life. These differences are also designated by the somewhat colorless term, *variability*. How important variability is in society is recognized by any employer. The teacher sees its importance when he reads the examination papers of his students. The football coach is keenly aware of the differences among the players on the team. If there is any doubt about the importance of individual variability, give thought to the selection of a boy or a girl for courtship and marriage.

So we plan to consider variability in the next few paragraphs. We begin with biological variability. Though men are supposed to be created equal before the law, they are not created equal biologically.

The Nature of Variability

Attributes. Variability is of two types. A trait may vary in degree or it may vary in kind. A good illustration of the latter type of variation is the sexual characters. There are two kinds, male and female, with no intermediate types, except in pathological cases, at least so far as objective measurable characteristics at present show. Some of the secondary sexual characteristics of the male, such as body contour, may vary in the direction of that of the female, but there is a big gap between the two types. Variation of this kind is said to be discrete or discontinuous.

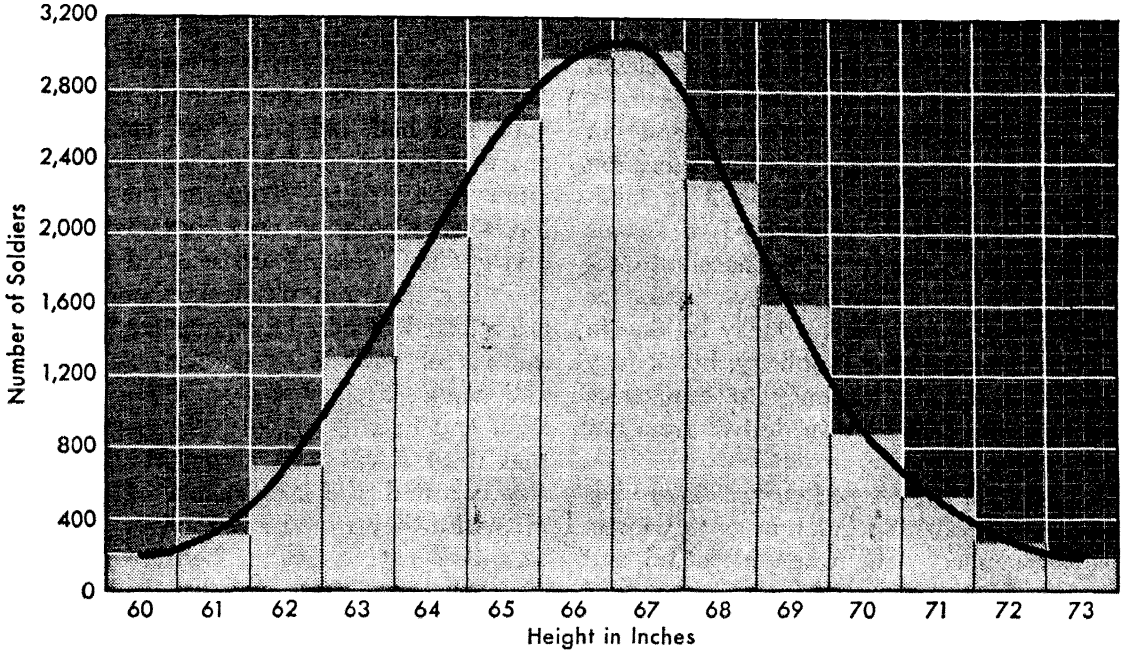
Continuous variation. Variation in stature presents a very different picture. If 1000 soldiers were lined up in order of height, from the shortest to the tallest, a line joining the tops of their heads would make a smooth, gently sloping curve. Variations of this nature are termed differences in degree, rather than kind, and are seen to be continuous if a large sample of the population is measured. The statistics of so many soldiers would be difficult to present in a book if the individual heights were thus arranged in order.

Usually the statures of many cases are *grouped*, as in Table 1, which shows the statures of 18,780 soldiers in 1918. In this sample there are 197 soldiers with statures between 60 and 61 inches. These data can be shown in a picture by drawing vertical columns, or bars, proportional to the number of soldiers over each inch of height on

Table 1 · Distribution of the Heights of Soldiers*

Height in Inches	Number of Soldiers
60–60.9	197
61–61.9	317
62–62.9	692
63–63.9	1289
64–64.9	1961
65–65.9	2613
66–66.9	2974
67–67.9	3017
68–68.9	2287
69–69.9	1599
70–70.9	878
71–71.9	520
72–72.9	262
73–73.9	174

*Reprinted by permission from G. C. Whipple, *Vital Statistics* (New York: John Wiley and Sons, Inc., 1919), p. 377.



39 Distribution of the Heights of Soldiers

The numbers along the base line represent the scale of the heights, in inches, of the 18,780 soldiers (see Table 1), and the heights of the columns erected over the scale represent the number of soldiers of a given height. A smooth line has been drawn which joins the midpoints of the tops of each column. This gives a curve approximating the well-known normal probability curve. There are very few short soldiers and not many tall ones; most of them are near the average in height. Nearly all of the biological traits, when measured for large enough numbers, are distributed somewhat like the heights of soldiers. Psychological traits also seem to follow such a distribution. (Data from Frederick C. Mills, *Statistical Methods,* New York, Henry Holt, 1938, p. 87.)

a base scale as is shown in Figure 39. Such a picture is commonly referred to as a "bar chart." These bars give us a rather jagged picture of the distribution. Therefore, to emphasize the continuousness of the variation, a curve has been drawn, connecting the midpoints of the tops of each of the bars. This curve has somewhat the contour of a bell; hence it is frequently referred to as a "bell-shaped curve." This type of curve is loosely referred to as a normal probability curve since when it is perfectly symmetrical it is very much like the mathematical normal probability curve. We may say that the probability of a soldier being near the middle of the scale is great and the probability of his being near either end of the scale is very small — or, in other words, persons of near average height are more common than the very tall or the very short. Almost all biological traits, when measured and plotted in large numbers, exhibit this type of curve.

The concept of variation as continuous, rather than discrete, seems difficult to hold in mind. We tend to think of persons as being either quick or slow, good or bad, forgetting that these terms refer to traits found at the extreme ends of a continuum. When we say that persons are bright or dull, we are merely picking out the extremes, forgetting the many in between.

Picturesque and dramatic though such classifications may be, they are far from accurate, for most variables are continuous and not discrete. As we explained in the discussion of sociology as a science, the habit of classifying into only two categories is a serious distortion of reality and is inaccurate reporting. Why we have such a mania for dichotomies is not clear. It may be due in part to a demand for simplicity, but it may also arise from a tendency to exaggerate distinctions, which in turn derives from our love of the dramatic.

Why a bell-shaped curve? There has been considerable speculation as to why so many biological data, when measured and plotted, take the form of the bell-shaped curve. One theory claims that the chances of death are greater for the extremes and less for the average. Some evidence seems to support this hypothesis. The death rate for the very small and the very large is much greater than that for average-sized men.[7] Weights of newborn babies, however, also conform to the normal probability curve, thus giving rise to the hypothesis that heredity is the determining force in producing this bell-shaped variability pattern.

It should be noted, however, that variability also results from the operation of environmental influences. LaPiere[8] found that of 100 auto drivers who approached an important street crossing in a residential district which was unguarded by stop signs or a policeman, 1 driver stopped completely, 21 slowed up considerably, 65 slowed up a little, 12 went on as before, while 1 driver speeded up a little. The behavior of these drivers, which approximates roughly the normal probability curve, could hardly be ascribed to genetic factors. Environment, then, shapes variability even as does heredity.

[7] *Statistical Bulletin* (New York: Metropolitan Life Insurance Company, 18[5]: 2, May 1937).

[8] R. T. LaPiere and P. R. Farnsworth, *Social Psychology* (New York: McGraw-Hill Book Company, Inc., 1936), p. 400.

Any population is a result of selection. We say there are all kinds of people, good and bad, tall and short, etc. But in any one society some kinds are represented more than others. Thus in the military forces of a country, only those with good eyesight and hearing are selected for service. The frail and physically handicapped are rejected. Similarly, among the primitive hunters of wild foods we find only those with strong backs and legs, with good eyesight and hearing. Also these hunting peoples must have good judgment about the weather and the movements of animals; otherwise they would not survive. This observation is interesting, because our ancestors were primitive hunters for hundreds of thousands of years; and our legs and eyes and ears are as good as they are because of the selection of our forebears through the long millenia of the past by the elimination of those weak and poorly endowed.

The selection of the good or the bad which affects the quality of a population of a society is of two kinds, natural and social.

Selection by nature. Natural selection by common usage means elimination of certain variations by nature, through excessive cold or heat, by parasites, by attacks of wild animals, etc., such as is experienced by all life in the wild state. Natural selection as it affects man is important for sociology in that it is a factor in setting the quality of the population and in that the direction of the evolution of mankind — a long, slow process — is likely to be in the direction set by the forces of natural selection, other things being equal.

Selection by nature is not confined to the selection of *individuals* for survival. Nature also selects some *groups* for survival and eliminates others. Thus, among termites the group contains specimens that do not breed at all and would thus be eliminated if selection were solely on an individual basis. But these sterile termites help the colony to survive because they are effective workers.

Group selection by nature is effective in such insects as bees, ants, and termites.

Group selection is also observed in human groups. Peoples have been exterminated by wars, and combat is more effective when the group is well organized. Not all rulers or inventors who have strengthened their group organization have been men of brawn and good health. Steinmetz, the inventor, was a hunchback and would have had difficulty in surviving as a primitive hunter.

Social selection. The second type of selection is social rather than natural, although society exists among wild animals even where their culture is rudimentary. So the social and the natural do not make a perfect contrast. What is meant by social selection is usually a cultural selection, that is, a social selection operating through the media of culture. Thus the hangman's noose and the tuberculosis hospital are agencies of culture operated by the group which have a selective effect.

The contrast between natural selection and social selection appears when we observe that our society selects for survival individuals who would perish in the natural state. Thus dentists, physicians, surgeons, ophthalmologists assist many individuals to live who would have died in the wild state.

Social selection is therefore a group activity as seen in many social practices. Social workers, for instance, spend their time in assisting those in need of help, that is, the weak. Our Social Security laws are directed toward the same end. Much of the good work of the churches is to assist the needy. Neighborly life in general consists of much mutual assistance. The role of mutual aid in selection both among humans and in animals without much culture was impressively set forth many years ago by Peter Kropotkin in a book called *Mutual Aid.*

The observation that social selection is less rigorous than natural selection and hence permits individuals living in a culture to survive who would be eliminated in a wild state without such social aids may be only a part of the picture. For society may be more ruthless in selecting than nature. For instance, in modern human societies the competition and mental strain are sometimes very great; and it may be that many become neurotic or psychotic who would not in simpler societies. Hence in some areas, social selection may be more rigorous in modern cultures, eliminating those who cannot stand the nervous strain.

Nevertheless in many physiological aspects of life, social selection, it is generally agreed, is softer than natural selection and permits a wider range of variation than would be found in "nature." This wider variation is seen among domesticated animals, for domestication is a kind of social selection. For instance, there is a much greater variety of domesticated dogs than there is of wolves and jackals. Men and women are to a certain extent domesticated animals. If we lived in trees as our ancestors did, the long hair and big breasts of modern women would be inimical to survival.

Sexual selection. We have said there are two forces of selection, natural environment and social. The illustrations cited have been of a selection based upon death or survival. However, a selective force other than death is breeding, usually called sexual selection, which operates as both natural and social selection. If a man or a woman has no children, the qualities which they bring to society are not passed on by heredity; and their elimination is as definite as selection by death.

Sexual selection may improve the stock. When male moose battle each other during the mating season for the possession of females, it is the stronger who wins. The flight of several drakes after the duck serves a selective function. Peasants tend to prefer strongly built women who can work hard and produce healthy children. The

qualities youth look for in mates have much to do with the future quality of the race. Such choices are often governed by fashion, as in figures or in face or hair color, rather than by considerations of greater biological value.

Planned selection. The effect of culture and mutual aids of society on individuals who could not live without such help has raised the possibility of improving the quality of the people by discouraging the least fit from marrying and encouraging only the most fit to marry and have children, thus counteracting the softening effect of socio-cultural aids which permit the weak to live and pass on their strain. This idea is called *eugenics,* launched by Sir Francis Galton. Galton would replace the *laissez-faire* of nature by biological planning. The idea of eugenics is older than Galton. The farmers who bred sheep practiced it. The high state of our agriculture is based on selective breeding. Eugenics for horses is a fine art. But we cannot mate men and women the way a farmer mates studs and mares. Hope rather lies in voluntary choices. But romance is concerned also with music and poetry, moonlight and roses, and with aesthetic tastes, social manners, and common spiritual values.

Eugenics, in the few years since the idea of applying selective breeding to human beings was conceived, has been an admitted disappointment, as so many dreams are. For it is more a hope and less a science than was at first thought. It fails as a science because we do not have knowledge about the genes which a man or woman carries. For instance, a man and a woman each with a Ph.D. degree could have a feeble-minded child, if each carried a gene for feeble-mindedness. Planned selection is beset with difficulties. An amusing story, whether true or not, is told of Isadora Duncan, the famous dancer, who was so enamored of the idea of eugenics that she proposed that she bear a child fathered by Bernard Shaw, saying how gifted the offspring would be with his mind and her body. To which Shaw replied, "But suppose the child had my body and your mind!"

Eugenics fails also as a social science because we do not know enough to obtain the controls necessary. These controls are simple for a farmer who deals with bulls and cows. Far different is the situation in human society. A farmer breeds for milk or beef, but multiple are the goals of human breeding, and about them there is much disagreement. These goals are the products of values as well as of science. Then there is the resistance of our mores of freedom and the absence of wisdom in exercising controls. The immature nature of eugenics, both as a biological and a social science, does not mean that at some distant date eugenics may not become one of the most important of all human endeavours. The idea back of eugenics is profound, but to realize that idea requires more than a five-year plan.

Some of the fervor of social scientists for eugenics has been reduced by the rise of the idea of culture, about which Galton knew little. Briefly this idea of culture is that what a man does is determined in many areas of activity by what he learns rather than by the genes which he inherits. The genes determine the eye color, but an Einstein born in an illiterate culture would have been illiterate all his life and would never have produced his famous formula $E = MC^2$. Within limits for man living in a culture, there is often little correlation between structure and function. Culture can be changed greatly without any change in the hereditary structures of man.

In other words, we can go far along the road of cultural progress without eugenics. At one time it was thought that our social progress over a few centuries was due to biological progress. But now we know we

do not need biological change to have social change. This statement does not mean, of course, that eugenics is not of profound importance and that it may not at some distant day be practiced to a considerable extent.

Improvement by selection is not unlimited. The fastest an athlete has been able to run a mile is three minutes and fifty-eight seconds. Prior to 1954 this speed had not been reached, and for many previous decades the mile had never been run under four minutes. While this record of 3:58 may be lowered, it will not be lowered much. We therefore think that there is a limit beyond which a selection cannot be made.

Such a limit is a result both of heredity as measured by the germ cell and of the environmental influences on the individual resulting from care and training. An athlete's record is influenced not only by inheritance, but by training, food, etc. Although the exact limit set by heredity is difficult to determine, selection has limits.

In conclusion on natural selection, the basic assumption of the selectionists is only partly true. Selection is by no means the only factor affecting the quality of the population. The quality of a human population is affected by schools, for instance, by scientific medicine, and by nutrition, as will be discussed in a later paragraph.

Mutation and intermixture. There are still other factors affecting the quality of peoples. One of these is mutation, which is a variation, outside the limits of normal variation, that breeds true. For instance, blue eyes and fair hair were at one time mutations beyond the normal range of variation among dark-haired and dark-eyed peoples.

But mutations are rare, require a long time to get established in a population, particularly in large communities. Then, too, most mutations appear to be harmful or of little survival value.

Of another factor, intermixture, more is to be expected. Society has been very much concerned with race intermixtures, as seen in its interest in Eurasians, mulattos, mestizos, and half-breeds; and in some quarters the prestige of so-called "pure" races is high. Mixed types must therefore be seen both in terms of their biological consequences and in terms of their social implications.

From the biological side, the breeding of brothers and sisters, as occurred in royalty in ancient Egypt and in the Inca nobility of Peru, or the breeding of cousins in our culture, increases the probability of accentuating certain traits, some of which may be good, as, for instance, quickness of reaction, or bad, as, for instance, weakness in hearing. Intermixtures have their various qualities, some considered bad, others good. Hence breeding outside family lines lessens the chances of such accentuation of particular traits. In small bands or communities of only a few families, such as have existed throughout most of man's stay on earth, there was much inbreeding, which tended to establish certain traits. In a large city like New York there is less chance that this will happen.

Races are great conglomerations of families with different inheritances, but all the human races constitute only one species. Intermixtures of races for most traits should be much like the intermixture in large city populations. At the present time populations in all countries, of whatever race, show great intermixtures of racial types if not of races. Thus the Scandinavians in Norway are not all blue-eyed, fair-haired, and long-headed. Many are dark-eyed, black-haired, and round-headed. There are also many combinations of these traits. So we say all peoples are far from being pure types but represent much intermixture due to frequent wanderings and conquest throughout the long past.

The social consequences of intermixture, particularly of widely different races, may be harmful, not to the biological product, but to the social product. If society, or part of it, condemns the intermixture of the "bloods" of whites and American Indians or of Chinese and Negroes, holding one race to be inferior to another, the lot of the offspring of such intermixtures may be very hard indeed, for they may carry ineradicable physical markings of the race held to be inferior. Or they may be considered good by the race labeled inferior if they carry the markings of the so-called superior race. Society condemns some mixtures and praises others. This is a fact as truly as brown or yellow skin is a fact.

The Influence of Environment

Improving environment offers great possibilities of bettering the quality of peoples. The possibilities of improving the capabilities of mankind are greatest through modifying the environment, as farmers do with fertilizer and superior foods and as trainers do with practice and the learning process.

The college population of the United States is getting taller, as shown by surveys [9] of the student bodies of several colleges over spans of years during the twentieth century. The Army reports that the number of men who are five feet ten inches and over has increased 45 per cent since 1918, and the number over six feet, 70 per cent.[10] This increase in size is not due to selection, for the children are larger than the parents. The causes of this increase in size are thought to be two: the decrease in childhood diseases and better feeding. Professor Boas [11] has shown that on the average the retarded growth due to illness in infancy and childhood is not wholly recovered. Several studies in the United States and in England in the early part of the twentieth century have demonstrated that the school children in poor neighborhoods were smaller than the children in neighborhoods with high incomes, where presumably the diet was better.

The prevention of disease is made possible in large part by the discovery of the germ theory of disease; and the attainment of greater growth is due in the main to the discoveries of the roles of vitamins, amino acids, and minerals in the diet. Of these two very great discoveries the first is primarily a preventer and the second primarily an improver.

The study of nutrition has achieved the status of a science only in the twentieth century. Before that, it was largely the subject of fads. Now for every statement there is experimental evidence, though many of the experiments are not wholly complete, especially for human beings, and they may be, of course, misquoted and misinterpreted.

There would appear to be good prospects of improving biological man through nutrition without, perhaps, as spectacular results as those achieved by the farmer. Hothouse tomatoes grown in a tray of liquid or sand with adequate chemicals yield at the rate of 250 tons per acre, whereas California's ordinary field grown tomatoes come at the rate of 3 to 30 tons per acre.[12] The effect of environment on man is particularly significant, however, during the growing period, espe-

[9] Marion Gillim, "Physical Measurements of Mount Holyoke College Freshmen in 1918 and 1943," *Journal of the American Statistical Association*, 39: 53–56, March 1944.

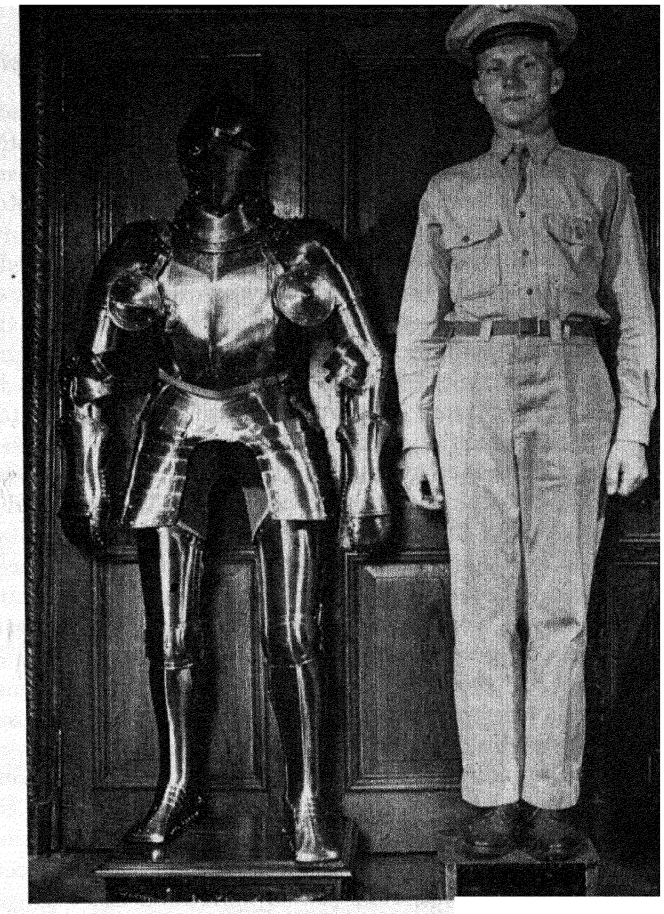
[10] *Science News Letter*, September 11, 1954, p. 170.

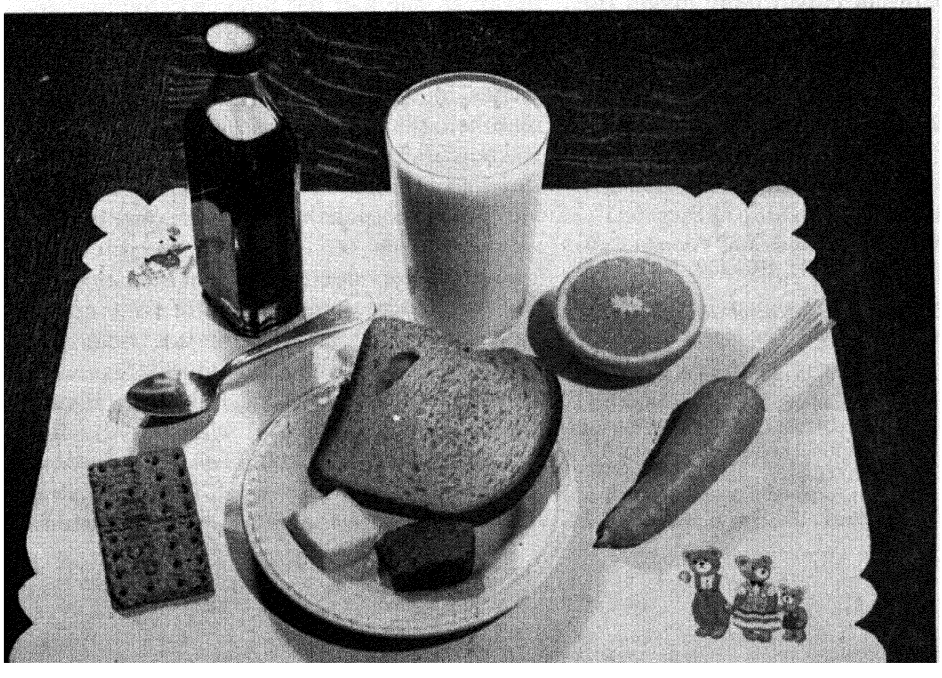
[11] Franz Boas, *The Growth of Toronto Children* (Washington, D.C.: Government Printing Office, 1898).

[12] D. I. Arnon and D. R. Hoagland, "Crop Production in Artificial Culture Solution and in Soils, with Special Reference to Factors Influencing Yields and Absorption of Inorganic Nutrients," *Soil Science*, 50: 468.

40 Culture and Biology

Warriors are bigger since the time when knights wore armor. An average United States recruit (5 ft., 8.4 in.) could not wear this sixteenth century fighting gear. Two reasons for the increase in stature are fewer childhood diseases and better nutrition. The Oslo breakfast (below) increased the average height of fourteen-year-olds in Norway by four inches. It consists of milk, orange, whole-wheat bread, cheese, rye biscuit, carrot, and a spoonful of cod-liver oil. The environment can thus modify the structure of the individual without reference to selection or heredity; but the favorable environment must be maintained in each generation if the gain is to be retained. The taller stature is socially valued in part because it is correlated with better health, greater strength, and greater athletic prowess. (Photography by Nina Leen for *Life*, copyright Time, Inc.)





cially the earlier part. Changes in the anatomy during the early growing period are lasting, and for this reason such changes are sometimes interpreted as the effects of heredity.

The possibility of improving the average quality of the human race through nutrition is large. For instance, the absence of vitamin B_1 (thiamin) from the diet has the effect of producing listlessness and pessimism.[13] It is sometimes referred to as the morale vitamin, for the apathy was dispelled in the human guinea pigs when thiamin was restored to the diet. For these reasons bread for United States soldiers in World War II was impregnated with thiamin. The elimination of manganese from the diet of female rats with young made the mothers neglect their offspring and show no signs of affection for them.[14] Large doses of ascorbic acid have been reported as restoring the fertility of bulls and cows [15]; and quadrupling the normal consumption of vitamin A has postponed in rats the degree of inefficiency which comes with age. Fluorine (in water), ptyalin (from vitamin B_1) and tryptophane (an amino acid from proteins) reduce the chances of the decay of teeth. "It has been found that 0.1 mg of cobalt daily makes the difference between life and death in a sheep. A lack of this minute amount was responsible for the death of tens of thousands of animals yearly before this discovery was made." [16] Excessive consumption of phosphorus and potassium-bearing foods [17] prevents the retention of calcium in the system, without which happiness is said to be more difficult to attain. Vitamin B_{12} promotes growth. The absence from the diet of laboratory animals of Vitamin B_2 has produced cataracts leading to blindness, as has also the absence of Vitamin C and one of the amino acids, tryptophane, found in proteins. The student must remember that in biological activities there are many factors and that diet does not depend upon just one element. The minerals, amino acids, and vitamins are to be had in our traditional foods, though not all our diets are adequately supplied and balanced. Necessary elements, however, are being increasingly purchased from drugstores.

More dramatic are the results from the acquisition by the body of additional hormones. Very spectacular is the effect on growth of one of the hormones of the pituitary gland. Giants, beyond the known normal limits of growth, can be produced by this hormone. Thus rats and dogs have been grown to twice their normal size by injections of the growth hormones of the pituitary. The injection of another hormone of the pituitary has brought on sex maturity in rats in one half the time of its normal development. The smoothing of the transition to old age has been effected by sex hormones of each sex. Experimenting on human beings with hormones is new, and little is known. Yet the modification of man by the injection or consumption of hormones has powerful possibilities for better or for worse.

The changes due to these modifications of environment are only for the lifetime of the individual. The effects are not inherited, and if they are to be retained, the favorable environment must be repeated for each generation.

Influences of cultural environment. Important as are the variations in physical structure brought about by environment,

[13] M. K. Horwitt *et al.*, "Studies of Vitamin Deficiency," *Science*, 104 (2705): 407–408, November 1, 1946.

[14] E. V. McCollum *et al.*, *Newer Knowledge of Nutrition* (5th ed.; New York: The Macmillan Company, 1939), p. 262.

[15] R. C. Klussendorf, "Ascorbic Acid," *Guernsey Breeder's Journal*, September 15, 1941, pp. 451–452.

[16] Leonard A. Maynard, "A Chemist's View of Nutrition," *Science*, 105 (2729): 399–403, April 18, 1947, p. 400.

[17] Harold F. Hawkins, *Applied Nutrition* (Gardena, Calif.: Institute Press, 1940), pp. 112–113.

more important still to sociologists are those variations in the form of mental and personality differences brought about by the cultural environment. In these fields we find as great human variability as we do in the biological realm. One man is a law-abiding citizen, another is a criminal, one a militarist, another a pacifist. It is difficult to indicate any genetic basis for these variations, and in many cases it is almost impossible in the light of present knowledge to assess properly the relative roles of heredity and environment in producing these differences. This problem is a highly important one to sociologists, for if they are to understand and perhaps eventually be able to predict various aspects of human variability, they must have a thorough knowledge of the causes involved. A knowledge of the various biological factors, as well as social factors, causing human variability is of vital importance.

RACE

Anatomical variations occur not only among individuals but also among great groups of men called races. These differences exist and many are observable, there instance blue eyes, and also to natural selection such as that which favors dark skins in tropical areas. Different types are also produced by intermixture. While these differences exist and many are observable, there is much debate as to whether these anatomical differences are associated with different types of mental and emotional behavior, not just in families but in large groups of families known as races.

The nature of race. The concept of race has at times played dramatic roles in history, leading even to persecutions and wars. Despite the furor it has caused, there is a tremendous amount of ignorance on the subject. The Greeks classified all mankind as either Greek or barbarian, and the Jews pigeonholed everyone as Jew or Gentile. Yet none of these are racial groups. Race has frequently been confused with language, as well as with religion and nationality. There is an Aryan language, but no Aryan race. It is true that a certain people, thousands of years ago, brought the Aryan language into Europe, and for this reason they are sometimes called the Aryan race. But this is a careless usage, for many different racial types, such as the Swedes, Swiss and Spanish, speak Aryan tongues today. The use of a particular language gives no indication of one's race. American Negroes speak the English language, but that does not make them English. Many Germans seem to consider those speaking the Germanic language as members of the "German race," but the German state is composed of two different racial sub-types. The North Germans are more of the Nordic type, whereas the South Germans are Alpines, with round heads, dark hair, and dark eyes.

Culture generally has been confused with race. The fact that the Eskimo and the Magdalenian peoples living in the last ice age in France had much the same cultures has led at least one author, Sollas,[18] to argue that they were of the same race. Yet many races may share the same culture, as is true of the Hawaiians, Japanese, and whites in Hawaii, or one race may have two cultures, as is true of the Negro in Africa and in America. Culture must not be confused with race.

The great confusion frequently arising on these points is the result of failure to realize that race is distinctly a biological concept, whereas language and religion are cultural. The term *race* is used to describe the inherited resemblances and differences of large groups of human beings. There are great branches of the human species, just

[18] W. J. Sollas, *Ancient Hunters and Their Modern Representatives* (2nd ed.; London: Macmillan and Company, 1915), Chapter 12.

as there are great divisions among cows, such as Jerseys, Guernseys, and Holsteins. Among men, there are the white, yellow and black races.

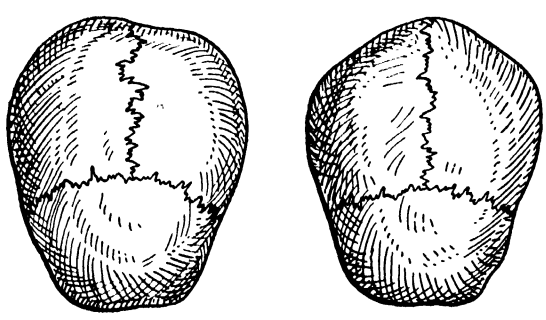
The criteria of race. Mankind cannot be classified into races simply by observing either superficial or single physical traits such as color or size. We cannot look at the bodily characteristics and safely assort various peoples into races. If this were done the Ainu of Japan, with their white skin, might erroneously be classified as members of the white race, and the dark Hindus of northern India might not be classed as Caucasian, which they are. There are several reasons why such simple classifications do not delineate races. Racial resemblances and differences are genetic, not merely somatic. Resemblances among peoples may be due to selection, environmental influences, or interbreeding and not due to resemblances inherent in the germ plasm. Thus some specialized groups of the yellow race such as Hawaiians or Samoans resemble the whites, a different race, in many readily observable characteristics probably as much as they do the American Indians, who are of the same race.

In distinguishing races it is extremely difficult, if not impossible, to be certain that the differential characteristics are due to heredity and not in part to environmental modifications as well. Several criteria of race are needed. Such attributes as stature and weight, which can be greatly modified by the environment, are of little value in identifying races. Hair form and eye color, on the other hand, appear to be more stable genetic factors. When anthropometry was first developing, it was thought that head form was the best criterion of race since the skull approaches its full growth early in life and was thought to be little influenced by the environment. But with the discovery by Boas [19] that the cephalic index may be materially altered by the environment into which the individual is born, this trait has been abandoned as the principal criterion of race, and now simply takes its place along with a great many other criteria. If, on the basis of these criteria, a group of people diverges greatly from other groups, we call it a separate race. Our concept of the main races must be broad enough to cover the smaller variations which may be occasioned by a particular environment. While there are small variations within a race, a classification of races tends to separate out the broader biological differences found in mankind.

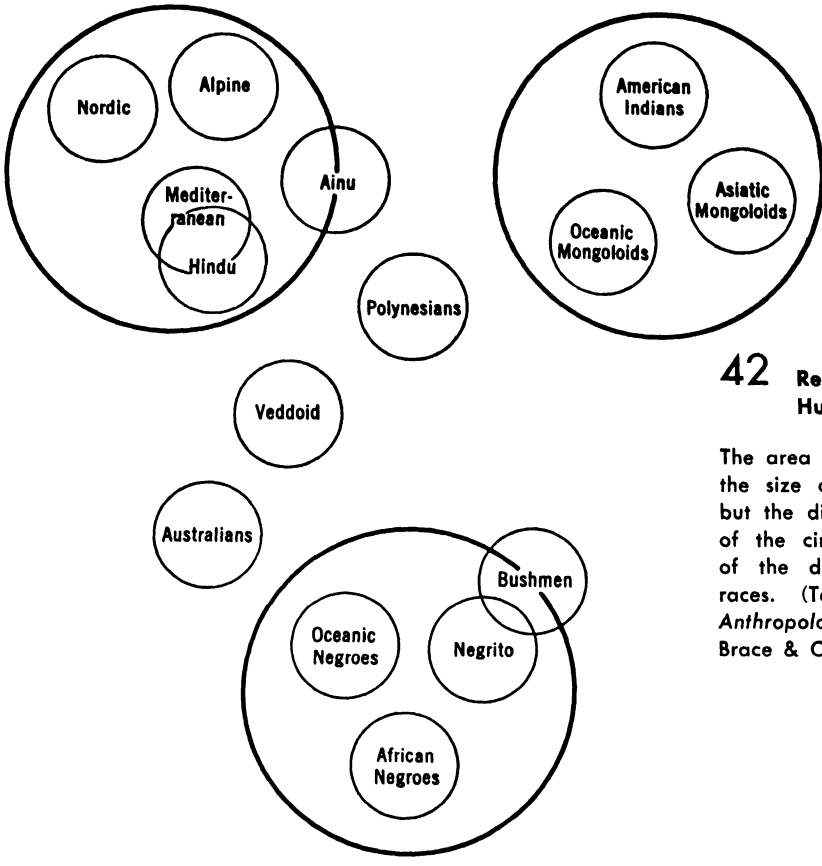
Classification of races. On the basis of the above criteria we may divide the human family into three main races. The Negroes, with their black skin and curly hair, are considered a separate race by all writers. Authorities on race also include the Melanesians, who have a slightly different nose, with the Negro group. The Mongo-

41 Change in the Cephalic Index

Head form, which comes to maturity early, was once thought to be the best criterion of race; but the illustration below shows how, like other body characteristics, it may be modified by the environment. The cephalic index of these foreign-born Jewish immigrants to New York is 83; that of their American-born grandchildren is 78.7. The cephalic index is the ratio of the breadth of the cranium to the length, usually expressed by a number denoting hundredths of the length. (Data from Franz Boas, *The Mind of Primitive Man*, rev. ed., New York, The Macmillan Company, 1946, p. 94.)



[19] Franz Boas, *Changes in the Bodily Form of Descendants of Immigrants* (New York: Columbia University Press, 1912).



42 Relationship of the Human Races

The area of the ring is not related to the size of population of the races, but the distances between the centers of the circles are roughly indicative of the degree of similarity of the races. (Taken from A. L. Kroeber, *Anthropology*, New York, Harcourt, Brace & Company, 1948, p. 140.)

loid, or yellow race, has lighter skin and straight black hair. In this group are also the American Indians, who migrated to the Americas about ten or fifteen thousand years ago and have become somewhat differentiated from the parent stock. The majority of researchers class the whites as a separate race, but a few tend to consider them an off-shoot of the Mongoloid race since white people bear resemblances to the possibly ancestral Mongoloid type. The Ainu of Japan and the Australoids seem to be types that overlap with other races. When a group of people remains alone in an isolated region over a long period of time, mutations may occur, and the process of natural selection and inbreeding due to life in small villages or bands may cause the new traits to become established in the population. Since races probably originated in this way, it is not surprising that simple taxonomy is not possible. Figure 42 shows the various races and their relations to each other.

Sub-races. Each of these great racial divisions of mankind may also be divided into sub-races, though there is considerable disagreement among authorities as to just what these subdivisions should be. In Europe, the coasts of the Baltic Sea and adjacent territories are the home of the tall, fair-haired, blue-eyed, long-headed type generally called Nordic. Around the rim of the Mediterranean lives a shorter, black-haired, oval-faced, long-headed type known as the Mediterranean. In central Europe, like a wedge with its point in Britain, is a short, broad-headed people labeled the Alpine type,[20] characterized by wide cheekbones, dark hair and eyes. The Hindus of north India, with their darker skin,

[20] Carleton S. Coon, *The Races of Europe* (New York: The Macmillan Company, 1939).

but otherwise European characteristics, are also classified as a sub-type of the white race. Each sub-type represents a complex mixture of different family strains. So also are the black and yellow races divided into sub-races.

Evolutionary advancement of different races. Great efforts have been put forth by many writers — spurred on, no doubt, by racial pride — to determine the race that has evolved furthest from its anthropoid ancestors. Various claims, not very well substantiated, have been made to show that the white race has evolved furthest. On the average, white people have larger craniums than do Negroes, but there are greater differences within the races than there are between the races. On the other hand, the heads of the Eskimo people are slightly larger than those of the whites. But the Eskimo ratio of size of limbs to body is closer to the anthropoid ratio than is that of the whites or Negroes. Again, the whites are hairier and hence more like the apes than are the other races. The lips of the Negro are more different from those of the apes than are those of any of the other races. None of this evidence justifies a conclusion that one race is further removed than another from anthropoid origins.[21]

Racial differences in mentality. Back of a large part of the present-day interest in race lie assumptions regarding the mental superiority of certain races. Psychologists and sociologists have attacked the question of racial superiority directly by giving mental tests to members of the different races. These tests do not measure inherited mental capacity. They might give some clues, were it not for the fact that they require that the subjects have a uniform background, in order to make the results comparable. Such a uniform background is impossible to obtain if we are to study races in varying localities and cultures. In the effort to get away from these differences in cultural background, recourse has been had to tests composed of diagrams and pictures; but the subjects are not equally accustomed to using pencils, and perhaps more important, to taking tests at all.

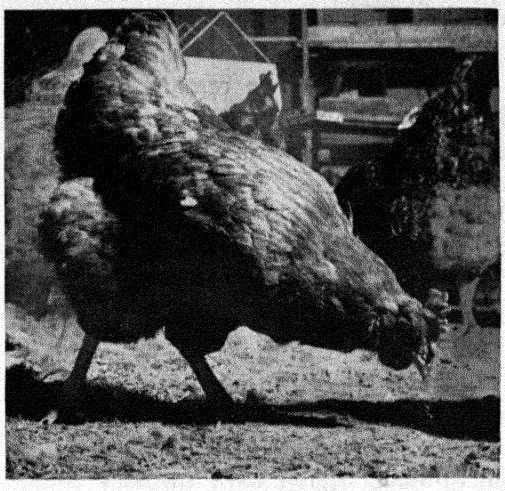
Differences in test intelligence. Some of the results from testing different races are as follows. Chinese and Japanese do quite well on our tests, having an average score of 99, as compared with 100 for whites. Southern Negroes do less well, and the American Indians (Mongoloids, like the Chinese) do the poorest, averaging only 75.[22] These differences in all probability reflect variations in culture, rather than inherited racial ability. If these tests measured racial differences we should not expect the average scores of the Chinese and the American Indians, members of the same race, to vary so greatly. It has also been found that Negroes educated in the North do much better on the test than those in the South. Klineberg[23] found that those Negroes who have been in the North but a short time got about the same rating as the Southern Negroes, which suggests that there is no particular selective factor of an intellectual nature involved in Negro migration. He also found a positive correlation between increase in IQ and the number of years of schooling in the North. From these studies it will be seen that no claim that one race is mentally superior to another is justified.

Skull capacity and intelligence. Skull capacities have been measured in an effort to show one or another race to be superior. Although the Negro's skull capacity

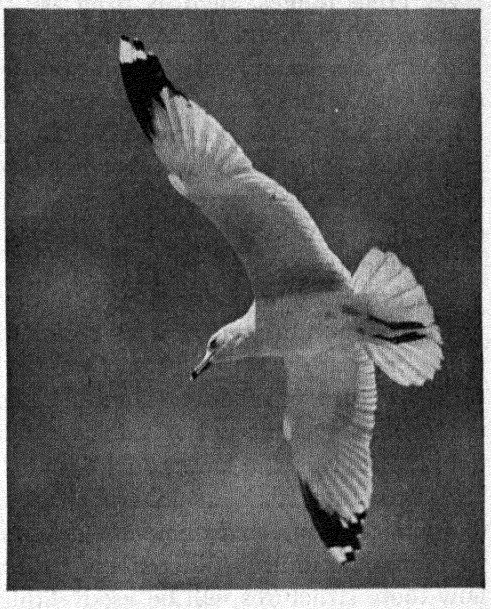
[21] Franz Boas, *The Mind of Primitive Man* (New York: The Macmillan Company, 1911), pp. 115–116.

[22] T. R. Garth, *Race Psychology* (New York: McGraw-Hill Book Company, Inc., 1931), p. 83.

[23] Otto Klineberg, *Negro Intelligence and Selective Migration* (New York: Columbia University Press, 1935); *Race Differences* (New York: Harper & Brothers, 1935).

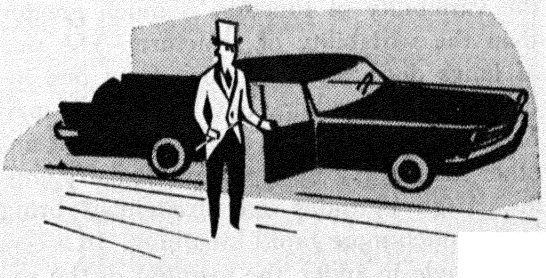












43 Biology, Culture, and Behavior

The variations in behavior of the chicken, the duck, and the bird are determined by heredity. Not so the variations in human behavior shown here. All human races are one species. What members of any one race can learn to do, members of other races can also learn to do. (Photos: Hen by Jim Baker, A. Devaney, Inc., New York; gull by Ralph E. Lawrence, Massachusetts Audubon Society; duck by Leslie A. Campbell, Massachusetts Audubon Society.)

on the average is smaller than the white man's, when the distribution curves for skull capacities for both races are plotted on the same scale it is found that there is a great deal of overlapping.[24] There are more differences within a race than between races. Furthermore, a slight difference in cranial capacity cannot be interpreted as an indication of difference in innate intelligence. Over great ranges, such as from the chimpanzee to man, these differences in skull capacity are undoubtedly significant, but to draw conclusions on the basis of small variations is a dubious practice. No significant correlation in modern man between size of skull and intelligence quotient has been discovered.[25] It would be foolish to select college students on such a basis.

Structure and function. In discussing the important question of racial differences, men are wont to forget the vital fact that structure is inherited, but behavior is not. Anatomy, but not physiological function, is used as the criterion of race. The basic structures that are inherited set limits to functions, but environmental differences, particularly cultural differences, determine how these structures will be used within the limits allowed by heredity. Furthermore, the variability of function is much greater than the variability of structure. The size of lungs does not vary much from one individual to another, but the lungs may breathe much faster at one time than at another, depending upon the particular stimulus. High altitudes and excitement bring about much more rapid breathing. In a certain jungle in India, the eyesight of the natives whose diet includes a great deal of honey becomes exceptionally good. They can follow a single bee for miles through the dense growth. The remarkable adaptability of man to all regions of the globe is a testimony to the variability of the functioning of his organs.

Different structures may vary considerably in the degree to which their functioning can be modified. The organs of speech are at one extreme end of this variation. Any people can learn to speak any language; the organs of speech in no sense dictate the language spoken. Since language is learned it can be varied greatly and hence is no criterion of race. Races with superior education do not necessarily have superior inherited mental abilities. We must be careful not to interpret cultural differences as the result of differences in race since culture is passed on as part of the social, not the biological, heritage.

Culture and racial mentality. The type of culture possessed by the members of any particular race is frequently considered an index of their racial ability. This idea flows from the assumption that people create their own cultures, that the type of civilization they possess is a direct result of their inherited capacity. This view was widely held when social thought was dominated by the idea of biological evolution, and little was known about the growth of the superorganic.[26] But it will be seen in a later chapter[27] that while no appreciable biological changes have been observed in man in the past ten or fifteen thousand years, his culture has changed tremendously. Other factors besides inherited mental ability, such as inventions and diffusion of ideas from one culture to another, play important roles in determining the level of a culture.

Conclusions on the question of racial abilities must be carefully drawn, for the subject is rife with emotion and the evidence is

[24] T. Wingate Todd, "Cranial Capacity and Linear Dimensions in White and Negro," *American Journal of Physical Anthropology*, 6: 97–102, April–June 1923.

[25] Karl Pearson, "On the Relationship of Intelligence to Size and Shape of Head, and to Other Physical and Mental Characters," *Biometrika*, 5: 105–146, 1906.

[26] W. J. Sollas, *op. cit.*

[27] Chapter 23, "Processes of Cultural Change."

shaky. We may say that there may be inherited mental differences among races, but the differences have not been proved, nor has any high degree of probability for such differences been established. There are differences in inherited capacities among family lines, but races are made up of millions of families and each race has its mental defectives and its geniuses. That men are created unequal is clear. That races are so created may be true, but the fact remains to be proved.

RACE PREJUDICE

We have seen that the test for race is heredity, and hence race is a biological conception. Yet the social reaction to racial differences gives it great social significance. Wars have been fought between races, as, for instance, between the American Indian and the whites. There is much injustice to one race caused by another, as, for instance, in race slavery. There are also serious discriminations against a race based upon rights, opportunities, and status. Man's inhumanity to man is often based on race. The emotions involved in these relationships are commonly called race prejudice.

Race prejudice is simply prejudice applied to race. We have reviewed the evidence on race which is biological. The evidence on prejudice is sociological; and prejudice is manifest in many other phenomena than race, as, for instance, religion. There have been religious wars, perhaps more of them than racial wars. There has been religious persecution, quite comparable to persecution of race.

Prejudice is therefore a general attitude that can be aroused by any group, whether racial or not. Attachment of prejudice to race has, however, the striking characteristic that race carries a label that is visible and can be inherited, as, for instance, color. A race cannot change its physical insignia as readily as a people can change a religion, their manners, their clothing, their tastes, or even their language. Furthermore, the identifiable insignia serve as stimuli to arouse prejudice, which tends to be directed against all members who carry the insignia, no matter how widely the members of the race differ in other characteristics, such as, say, education or income.

Race prejudice often rests upon erroneous beliefs about hereditary inferiorities. One racial group which is obviously inferior to another is likely to be inferior because of differences in learning and in experience, which are often believed erroneously to be hereditary.

Aside from these observations, racial prejudice as a social phenomenon can best be studied from the point of view of prejudice in general, about which there is an extensive literature, too extensive to be summarized here. However, some pertinent observations may be made.

Prejudice in general. Prejudice means to *pre*judge. We prejudge readily when emotion forces us to a conclusion without much thought. Indeed, strong emotion can at times block thought and blind us to observation. Once prejudice takes root, even familiarity with the facts may not eradicate it. Conclusions based on emotion are difficult to change, as psychoanalysts testify.

There have been several recent studies of the nature of prejudice by sociologists and psychologists.[28] Some of these inquiries have concerned the individuals who are most susceptible to prejudice. These are

[28] Notable are: Gordon W. Allport, *The Nature of Prejudice* (Reading, Mass.: Addison-Wesley Publishing Co., Inc., 1954); M. F. Ashley-Montagu, *Man's Most Dangerous Myth: The Fallacy of Race* (2nd ed.; New York: Columbia University Press, 1945); Bruno Bettelheim and Morris Janowitz, *The Dynamics of Prejudice* (New York: Harper & Brothers, 1950); Gunnar Myrdal, *An American Dilemma* (New York: Harper & Brothers, 1946).

generally the intolerant type. Since aptitudes for tolerance and intolerance are often set in early life, the factors affecting them are worth noting.

Tolerant children are likely to come from homes with a permissive atmosphere. They feel welcome, accepted, loved no matter what they do. Punishment is not harsh or capricious. . . . The keynote in their lives is security rather than threat. . . . their egoes find sufficient gratification without resorting to repression and without the guilt that leads them through projection to lay blame on others. . . . Since moral conflicts are, on the whole, satisfactorily handled, there is less rigidity and less disposition to be harsh with the errors other people make. . . . This greater mental flexibility of the tolerant person is shown in the rejection of two-valued logic. . . . He seldom agrees that "there are only two kinds of people, the weak and the strong." He does not bifurcate his environment into the wholly proper and the wholly improper. For him there are shades of gray.[29]

Group selfishness. Other studies on prejudice are concerned not with the individual but with group behavior. Notable are the concepts of the *we-group,* sometimes called the "in-group," and the outsiders, or *out-group.* Thus in ancient Palestine the Jews were the in-group and the Gentiles were the outsiders. Similarly there were Greeks and barbarians. The members of the we-group have a somewhat exalted opinion of themselves, which is called *ethnocentrism,* and display toward members of an out-group a selfish, callous attitude or one of aggressive ruthlessness. Their code of conduct toward outsiders is quite different from their code of ethics among themselves. Thus the members of the we-group are prejudiced against the members of the out-group. If the members of the two groups are of different races, the prejudice is called race prejudice.

Another characteristic of this behavior of the in-group toward the out-group is that individual variations in the out-group are not recognized by the members of the in-group. Thus all "Chinamen" are alike or treated as if they were alike. So prejudice is extended to every member of the out-group whether he be honest or a knave.

Underlying group or race prejudice are group egotism and group selfishness that are about as common among groups as egotism and selfishness are among individuals and about as difficult to eradicate. However, they can be held in bounds by law and custom and can be kept from being manifested at least in the form of injustices and the grosser discriminations.

GOALS

We have seen that man's capacity to learn is quite marvelous. By virtue of the lack of coordination at birth and his great learning powers, he is very flexible in adjustment, particularly in the period of infancy and childhood. That is to say he can adjust to a great variety of cultures and climates. An infant can adjust to the culture of the Eskimo, of the monastery, of the jungle, of Christianity, of paganism, of the army, of the hermit, of the ascetics. Because men can adjust to any of these cultures, it is not to be inferred that one is not better than another. Which is better? There are various criteria: religious, moral, aesthetic, spiritual, material, or biological. Without attempting to evaluate such criteria, we may choose one for consideration, namely, the biological.

In the case of foods, the number of edible substances is very large. The Hupa Indians live in large part on acorns, the Eskimo on seal meat, the Hopi on maize, the Salish on salmon, etc. These statements are oversimplified, it should be observed, for there are other elements in the diet, even in small quantities, to give some variety. But because man's appetite is highly adaptable, it

[29] Gordon W. Allport, *op. cit.,* p. 426. By permission of Addison-Wesley Press, Inc., publishers.

does not follow that all diets are equally desirable. Certain combinations of elements in a diet give better health and behavior than others. Thus, much or little of each or all elements may be eaten, but one amount and one combination gives a better adaptation than another. The same is true with physical exercise, with sex behavior, with sleep, with recreation, etc. While we may adapt in different fashions to a vast variety of situations, there will be one or more adaptations that are better than others.

SUMMARY

Man has evolved from the simians and his culture has the limitation of the capacities of his species. The predispositions of his species also have a selective value in choosing types of cultural behavior.

Of these predispositions, the tendency toward gregariousness is especially important for sociology which deals with society. Gregariousness is a label for certain of man's learned responses to others, responses which are almost infinitely varied and which relate to sociability.

The first law of life in the biological world is adaptation to environment, and man does not escape this law. But man's environment is culture as well as nature. A better adaptation can be had by changing (a) man or (b) culture.

To change culture to fit biological man, we must know biological requirements and have a high regard for them.

To change man to fit culture there are three methods: (a) selection, (b) mutation, and (c) modification of environment before maturation has been reached.

Selection within limits could improve the quality of the human race, as it has done the quality of cattle, if we had the knowledge, the agreement on goals, and the techniques of social control. Some day eugenics may be an applied science. Beyond the limits of the species we can go only if there are mutations, which are very infrequent.

The most profitable method of improving the constitution of man is to regulate the environment of infants and children through diet and control of disease.

QUESTIONS FOR DISCUSSION

1. What is wrong with Clarence Day's fantasy?
2. What limitations does man's biological nature impose on his cultures? Does it determine the details of culture?
3. How do man's biological predispositions influence cultural preferences?
4. In what ways does the biology of man affect his group-forming behavior?
5. Which is better, to adjust biological man to culture, or culture to man?
6. How could modern culture be better adapted to the biological requirements of man?
7. How does social selection differ from natural selection?
8. What are the strengths and weaknesses of eugenics?
9. How is race sometimes confused with culture?
10. If all races were equally well educated, would there still be race prejudice?

TOPICS FOR REPORTS

1. Universal culture traits.
2. Social selection in a primitive and a modern society.
3. The limitations of eugenics as a science.
4. The etiology of race prejudice.
5. The gregariousness of species of primates.

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The standard treatise on ecology. Especially valuable because of the treatment of animal sociology and also for new views on the group factor in evolution. The chapters by Emerson are particularly recommended for their succinct summary of the new views on the factors in biological evolution.

ALLEN, EDGAR (ed.), *Sex and Internal Secretions,* second edition. Baltimore: Williams & Wilkins Company, 1939.

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A critical survey of published material on twins and foster children.

5

The Geographical Factor in Society

If you were free and financially able to live anywhere you wish, would you choose the location on the basis of climate? Retired elders sometimes have that choice. Many choose Florida or California, because the weather is pleasant there. The ideal climate is said to be either that of an island in the subtropics, as, for instance, Hawaii, or that of high altitudes in the tropics, as, for instance, Chichicastenango, Guatemala, though some prefer less sameness and like a cold winter with snow and a warm summer, together with lovely springs and beautiful autumns. Choices of this kind are made on the basis of either comfort or aesthetic appeal. For the same reason, some like the seacoast and others like the mountains.

But sociology is not particularly interested in advancing aesthetics or making people comfortable, which are problems of other disciplines. Sociology's concern is rather with society and its achievements, which are largely manifest in culture. So we want to know what influence climate and geographical location have upon the social life of mankind. Did the climate of the Hawaiian Islands help to produce a great civilization there? We look not so much to the highlands of Guatemala with its attractive climate for a magnificent flowering of civilization but rather to such cities as New York, London, Paris. High mountains, stimulating though the altitude may be, are seldom the locale of the origins of great civilizational achievements. The earliest civilizations were in the warm climate of the lowlands of great river basins such as those of the Nile, of the Euphrates and the Tigris, and of the Indus. Perhaps it was not the climate that produced the great civilizations of Egypt, Mesopotamia, and India, for the climate and location were approximately the same there a thousand years before the rise of these civilizations and a thousand years after their decline.

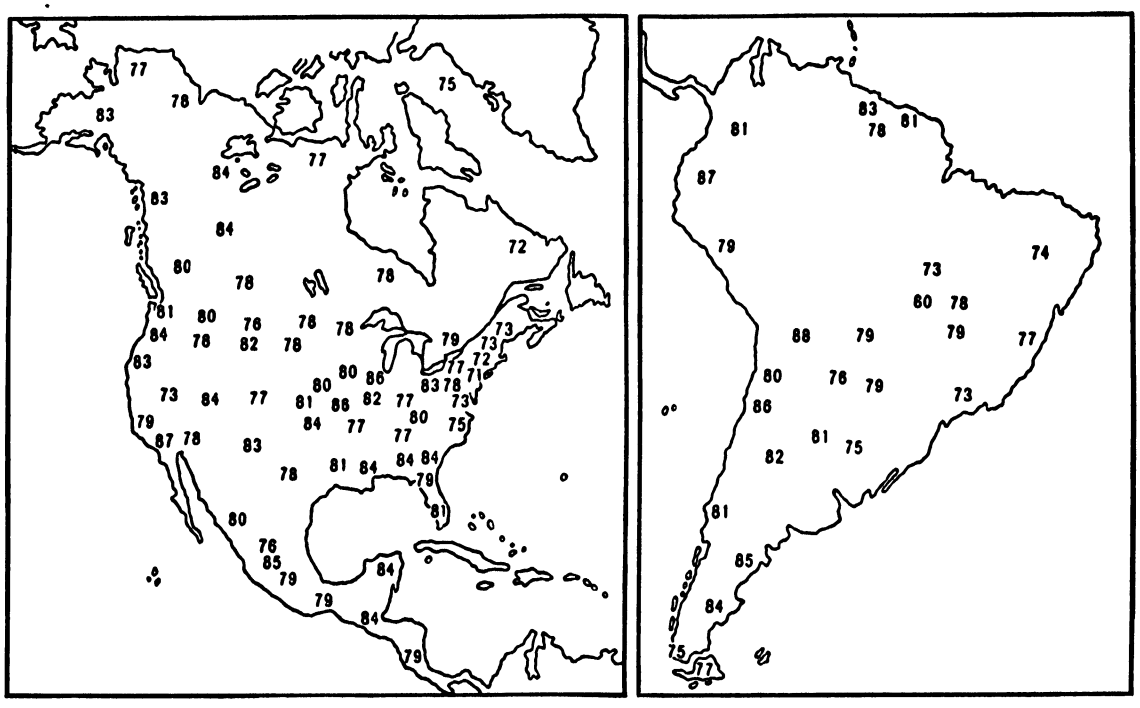
We wish to assess the factor of climate as it affects society.

GEOGRAPHICAL INFLUENCE ON PHYSICAL LIFE

Does climate affect races and thus through races influence societies? There is a popular belief that climate produces races and races in turn produce civilizations. Thus the hot sun of central Africa produces dark-skinned peoples, and the civilizations of tropical Africa are the achievement of its people.

There are thus two propositions. One is that climate affects physical type. The other is that society is the production of physical type.

Regarding the first proposition, climate and geographical location do have some influence upon anatomy. Thus the Eskimo have narrow openings in their noses, which help a little to warm the inhaled cold air as it passes close to the warm skin. Dark skin



Distribution of Cephalic Indices of American Indians

The variations in the head form of the American Indians indicated by the numbers on the map can hardly be the result of the environment. They do not conform to environmental differences and the head forms of the whites who now occupy these regions do not show the same variations as did those of the Indians. (Adapted from Clark Wissler, *The American Indian,* New York, Oxford University Press, 1922, p. 330.)

is found in tropical countries, and the pigmentation gives some protection from the sun. There are many other instances; on the other hand, different physical types may live in the same locality yet remain different in structure, as, for instance, the short dark Lapps and the tall fair Norwegians.

Not all the differences in physical types among human beings are the result of geographical location. Many are the result of biological mutations, minor ones, such as hair form. These mutations occur in the genes, the carriers of hereditary traits, which are pretty well protected from most climatic influences, though they may be affected, for instance, by radiation.

The climatic influences on biological type do not appear to be profound. That is, man lives in all climates yet is one species; and the observable variations are not great. The pygmies, though a small people, average around five feet in stature. The cross section of the hair of some people is round, and of others, elliptical. Pigmentation of eyes varies. But these differences are not known to be due to climate.

The second proposition is that physical type creates societies. Thus Galton argued that it was the hereditary genius of the Greek people that created the wonderful Greek culture in the age of Pericles. Though this belief is common, we may still question whether it is true. In Chapter 23 we have shown that the society of any particular people results from culture traits coming from many different peoples living in many

different parts of the world. We also show in this chapter that though societies have capable leaders of their institutions and though their new inventions are made by their own inventors, nevertheless other factors than hereditary mental ability (which may be present everywhere) are necessary to develop these institutions and the new inventions, mechanical or ideological.

But even though physical types should be effective in creating societies, it would not follow that it is that part of physical type that results from climatic influences which is responsible.

Pigmentation of skin and the size of the opening of the nose may have little to do with the quality of the society in which peoples with these traits live. The head form, which Boas showed to be capable of modification by environment, though not necessarily by climate, might be expected to be more closely related to mental achievement than color of skin. Yet no correlation has been found between shape of head and the IQ. Students are not admitted to college because they have long heads or round ones. The cephalic indices of the Indians of the Americas, which may be affected by climate, are shown on the map in Figure 44. The distribution of these long- or round-headed Indians is not correlated with the cultures they carry. For instance, the Mayans were round-headed with a cephalic index of 84, while the Incas were long-headed with an index of 79. Yet both had highly developed cultures. Some of the very simple cultures of California were carried by round-headed Indians, while the ones of Tierra del Fuego also with a very simple culture were long-headed, like the advanced Incas.

In conclusion, there is evidence that climate and geographical location modify in a limited manner physical types; but we have not found evidence that these variations in physical characteristics due to natural environment have any effect upon the group life or the culture of the peoples affected.

Is it possible, however, that the behavior of peoples can be affected by climate directly, without a modification of physical type? This question we next examine.

GEOGRAPHICAL INFLUENCE ON SOCIAL BEHAVIOR

Are we more energetic in one climate than another, and for that reason do we have a different social life? Some of us claim to feel more energetic in the springtime than in the winter, yet we have the same bodily structure in the spring as in the winter. Any differences we feel in the mountains and on the seacoast are not due to changes in our anatomy, but rather to our energy or the way our bodily structure acts. The differences in the way we feel at the seacoast or in the mountains may be due to the fact that we may be there on a restful vacation. In the spring we may feel better because we are out of doors more or take more exercise. It is generally admitted though that persons reared and living in the mild climates of the temperate zones feel lethargic in hot moist tropical climates. Yet the natives, born in the tropics and adjusted to the climate, may display as much energy as a person reared in and adjusted to the temperate climates. On this point, a reliable observer reports, "In the more moderate tropics which generally prevail, I have spent much time trying to ascertain the widespread belief that white men degenerate in the tropics. I found cases where there was a falling off of efficiency, but more cases where there was little or no falling off . . . and many cases where there was an actual increase in strength and efficiency." [1]

But social life is not solely a function of

[1] R. E. Danforth, "Under His Own Vine and Fig Tree," *Scientific Monthly*, 36: 539, June 1933.

energy. Social life consists essentially of interactions between individuals, usually influenced by social or cultural norms. It is made up of such behavior as is found in leadership, imitation, status maintenance, discipline, social pressure, team work, competition, cooperation, abiding by rules, respecting the rights of others, quarreling, fighting, stealing, cheating, marrying, and rearing children.

Social achievements may not be restricted by regional inadequacies. One of the theories of energy and achievement is based upon the glands of internal secretion, such as the thyroid, the pituitary, and the adrenals. The thyroid, whose basic chemical element is iodine, affects the utilization of oxygen. Persons with a deficiency of iodine develop goiter. There are a number of geographical locations where there is a shortage of iodine; Switzerland, the Central American highlands, the borders of the Great Lakes in the United States, and the northern Willamette Valley in Oregon. In Oregon, as elsewhere, iodine is now supplied in the drinking water and in table salt, but before this practice was begun, the civilizational achievements of Oregon were not meager. Its civilization was not low, certainly no lower than that of South Carolina, where there is so much iodine in the soil that it is called the iodine state. Perhaps the deficiency of iodine is compensated for in some degree by the exercise of the other glands. Though it is said that only a few grains of iodine separate an Einstein from a gibbering idiot, the influence of this source of energy is not discernible in the cultures of Oregon and of South Carolina.

Climate affects social life less than other influences. The influence of change of climate on behavior is most clearly seen in physiological functioning such as breathing, blood pressure, rates of growth, and sex behavior. These functions derive largely from localized organs, such as lungs, heart, pituitary glands, and gonads. There is, however, no localized organ for social behavior. It involves a large number of organs of the body, such as the nervous system, the eyes, ears, mouth, vocal cords, and glands of internal secretion. The integration of the functioning of all these organs into social activity means that the latter is greatly dependent upon learning and conditioned responses. It does not seem probable that changes in geographical conditions would modify social behavior as readily as they do the physiological functioning of specific organs.

Social behavior is learned behavior, different from automatic behavior such as breathing or the beating of the heart. Since social activity is learned, it can be varied by the learning process. We may speak different languages involving different rhythms and accents, depending on how we learn. The variations in behavior due to climate may be in turn varied by learning or culture. For instance, a computer doing multiplication may work two per cent slower on days when the temperature remains the same than on days when it changes, but if he uses a calculating machine, he may do the computations a hundred or a thousand times faster. The change due to learning overshadows the change due to climate.

Not only may the climatic influences be obscured by those of learning, but the cultural influences may be so numerous and so powerful as to make the effect of climatic change quite negligible. There are, for instance, many factors other than climate that stimulate factory production. Production may be affected by the piece-rate system, by practices of cutting piece rates, by personnel managers, by the business cycle, by advertising, by trade unions, by social legislation, by employment methods, by labor turnover policies, by bonuses, by plant lighting, by distribution of rest periods, by anticipation of holidays, by regulation of hours of labor, by the organization of the plant with refer-

ence to the flow of goods, and especially by machines. It can easily be seen that climate does not operate simply and directly on social behavior.

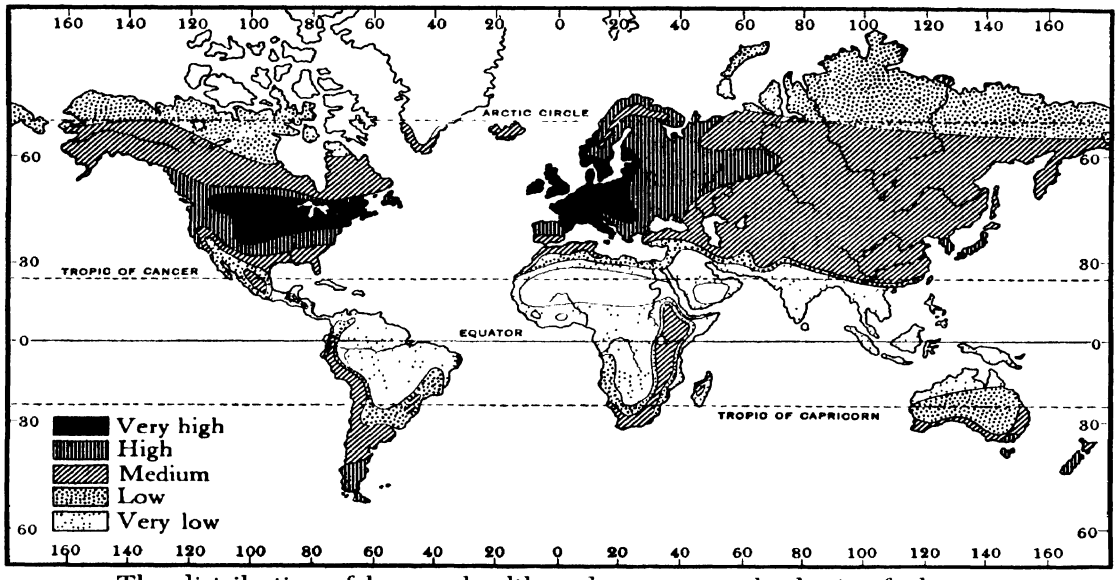
To cite another illustration, the air in high mountainous regions may be stimulating, but the mountain climate doesn't determine how the energy may be spent. It doesn't convert the accelerated heart beat, breathing, and adrenalin flow into cultural activity. Industrial production in a mountainous country like Norway or Switzerland may be much less than in a low flat country like England, which has better transportation facilities and more coal mines. The climate of high altitudes may be favorable for mental work, but more research work may be done at sea level if the universities are located there, for a sound research "atmosphere" depends upon stimulating mental contacts with other research workers as well as upon barometric pressure. The inhabitants of a great city like Philadelphia walk with a livelier step than they do in a small hamlet located in the same geographical region.

Though the cultural environment be more important than the natural environment as a source of variation in social behavior, the question may still be asked: is the natural environment responsible for our social heritage? Is culture the result of geographical influences? Our next concern, then, is to study the relation of geographical location to the superorganic.

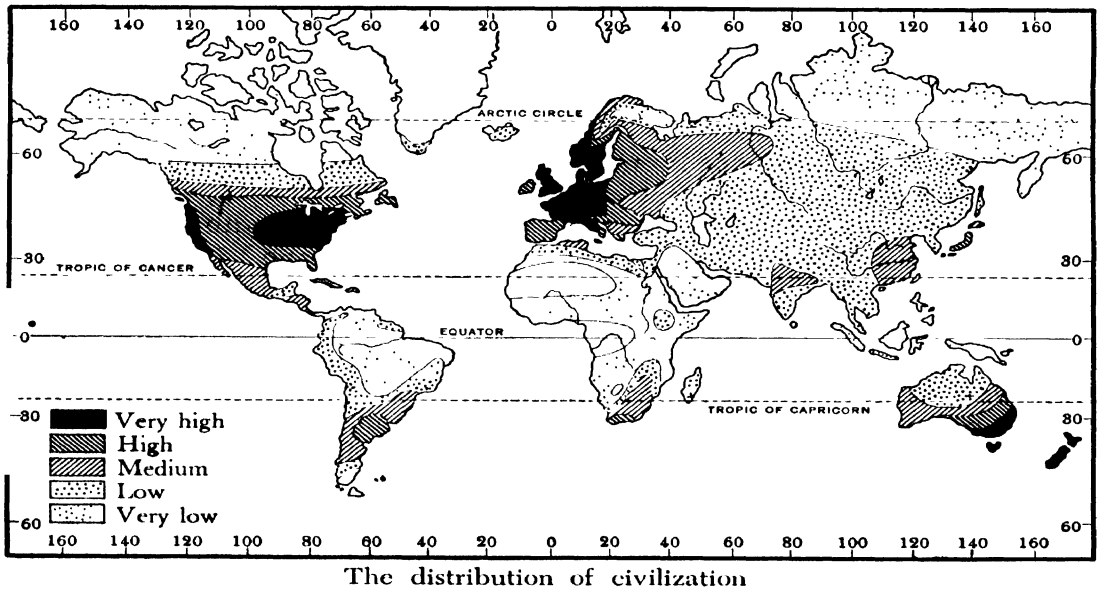
GEOGRAPHICAL INFLUENCE ON CIVILIZATION

The great civilizations of the world today are found in the temperate zones. Could the skyscraper buildings, the airplanes, telephones, universities and medical centers of the United States and Europe have been produced in any other climate or region? Does this great social heritage, to which the reader is heir, rest in last analysis upon climate? The usual statement is that the temperate zones have a more energizing climate than the polar and tropical zones with their severe cold and heat, and that this stimulating climate operating on man has led to the achievement of these great civilizations. This assumption, it may be observed, omits the racial theory of the origin of civilization — also a popular notion — and stresses climate as a feature of geography to the neglect of the resources of the soil.

A pleasant climate does not guarantee a high civilization. A comparison of a map indicating the temperate climate of the world and a map showing the location of the most important civilizations reveals marked similarities, as may be observed from the two maps prepared by Ellsworth Huntington, given in Figure 45. Some question might be raised concerning the accuracy and fairness of the measurement of energy and health as shown on the first map and its representation on a range from pure black to pure white. Health as measured by death and sickness rates is a function of medical progress and sanitation as well as climate. The Panama Canal Zone was by these agencies changed from an unhealthy locality to a very healthy one. Energy as measured by hours of work or production is similarly a function of technology as well as climate. Some question might also be raised in regard to the use of the terms "high" and "low" civilization as represented in the second map. Inhabitants of Russia, India, and China would not admit that their civilizations were lower than those of Western Europe, for instance. Not many centuries ago when climates were the same as now, China and India would have rated very high civilizations, as compared with Western Europe and with the United States. The civilization of warlike Europe may not be considered by moralists to rank as high as that of peaceful and orderly Iceland, which the map rates lower.



The distribution of human health and energy on the basis of climate



The distribution of civilization

45 Climate and Civilization

These two maps showing estimates of health and energy and of level of civilization show considerable similarity, with the help of the proper shading. Yet these supposed correlations may be due to influences other than climate and health. (From Ellsworth Huntington, *Climate and Civilization,* New Haven, Yale University Press, 1924, p. 295.)

But leaving aside these questions and the moral valuations of civilizations, the maps do roughly differentiate temperatures and set off the areas with complex technological civilizations from those with simpler ones. Yet the striking similarity does not prove that one is the cause of the other, or that the climate is the cause of the civilizations. It may be observed, for instance, that in the dark area covering the northeastern part of the United States, there is now a very advanced material culture. Three hundred years ago, when inhabited by the American Indians, this same area was much less advanced; yet there has been no appreciable change of climate during that time. If climate caused the high civilization at one time, why not at another? Before the coming of the white man to the Americas, the material and scientific culture was much more advanced among the Mayans in Yucatan and Central America than among the Indians of the northern United States. The Mayan culture was achieved mainly in the hot, tropical lowlands and not in the neighboring highlands of from 4000 to 8000 feet, where the climate to the white visitor is delightfully cool and stimulating. The Mayans had a culture quite comparable to that of early Egypt. They had more and larger pyramids than Egypt, though they were not used for burials. They invented a calendar which had months with an equal number of days, an attainment desired but not yet reached by us. They also invented the zero, which was not achieved by either the Greeks or the Romans, but was brought to Europe by the Arabs after the fall of Rome. The Mayans did not use metal tools or weapons and had no wheel or domesticated beast of burden. The fact that the locale of the advanced Mayan culture was the tropical lowlands instead of the high cool mountains is an interesting datum to set off against the idea that the tropics are too hot to develop a high civilization.

Central America and Yucatan have, according to Huntington's map, a much less energetic climate than the northeastern part of the United States, where the technological culture was crude compared with the Mayan. Also at that time the culture of most of the California Indians in that remarkable climate was about the lowest of any in the Americas. At one time the culture of Egypt was relatively much more advanced than that of Denmark, which on the climate map under discussion is a much greater source of energy than the valley of the Nile.

Factors other than climate affecting culture. In explaining the map showing the distribution of civilization, factors other than climate must be considered. For instance, in the twentieth century the extent of civilization is certainly dependent upon the resources of the soil, especially the energy resources. Energy is a much discussed climatic influence, yet the total energy of the supply of coal, oil, and water power of the United States is much greater than that of its population. It would require the labor of 13,000,000,000 human workers to do the work equivalent to the horse power of the machines in the United States.[2] The fact that the United States and Europe have abundant coal is one reason for their cultural advance.

Another factor is the state of inventions. Until the steam engine was invented coal was not of much use. Coal meant nothing to the American Indian. Furthermore, the machines that use coal, such as the steam engine, are made of steel which is in turn made of iron, which is not a climatic factor. Though coal, oil, falling water, and iron ore are not climatic factors, they are products of geographical location. If the distribution of civilization as shown on the map in Figure 45 were the result of geographical influence

[2] Compiled from data in J. Frederic Dewhurst *et al., America's Needs and Resources* (New York: The Twentieth Century Fund, 1955).

alone, civilization should have been spread over the Americas in the fifteenth century in the same manner as it is now found in the twentieth. Clearly important factors other than climate are needed to account for the variations in civilization. These factors are considered in Chapter 23.

The uncreative role of geographical environment. The culture of Scandinavia fifteen hundred years ago was not very greatly different from some of the advanced cultures of the American Indians. In some ways it was not so advanced as that of the Mayan Indians at that time. The Scandinavians had cattle and metals, but they used the bow and arrow. Their housing was crude, and superstitions were common. Today Sweden, Norway, and Denmark have as advanced a culture in many respects as is to be found in the world, with all the modern developments of science and technology, and with a high development of cooperative organization and progressive legislation. Yet during this time the geography around the Baltic Sea has not changed appreciably.[3] The growth of the culture could not be due to changes in geographical conditions. Some other causes must be sought.

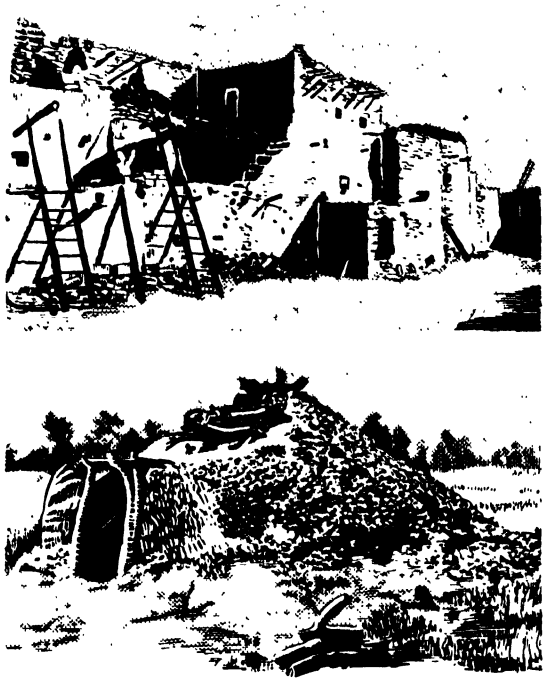
Again, there are peoples living in essentially the same climate who have widely different cultures. In the southwestern part of the United States the Hopi and the Navaho Indians have lived for centuries in the same locality, but their cultures are quite different. The houses of the Hopi are built of adobe and may rise for several stories like apartment houses. The Navaho live in single-room dwellings, shaped much like the Eskimo domed snow house, but built of branches of trees. The Hopi are agriculturists and harvest crops. The Navaho are nomads and graze sheep. The religion and family life of the two groups are quite different. Since under the same physiographic conditions we find vastly different cultures, we must conclude that climate plays no precipitating or creative role in building the social heritage.

[3] "Since the beginning of human history, there have been no striking changes in the major land and water features of the earth." While climate has been less stable, "daily weather changes are more pronounced than changes over a long period of time." C. C. Huntington and F. A. Carlson, *The Geographic Basis of Society* (New York: Prentice-Hall, Inc., 1933), p. 68.

NATURAL RESOURCES AND CIVILIZATION

Geographical location furnishes materials which may at one time or another be used to develop the superorganic. The houses of a people are usually made of materials of the region. The production of pottery is dependent upon the supply of the proper type of earth. The clay in the Euphrates Valley was favorable for making small clay blocks on which the writing known as cuneiform was developed. Papyrus was native to Egypt, where it was used for writing paper. The Samoans use the thin lining of the bark of native trees for making clothing. The reindeer was domesticated by the Lapps in the North, where it was native, while the horse found on the plains was domesticated far to the south by the people living there and not by the Lapps. Certain it is, then, that nature presents materials for culture to use.

The land of the United States is one of the richest areas in the world in natural resources — in coal, iron, uranium, bauxite, and water power. The cultural development has reached a stage where it is possible to utilize these abundant materials, which could not be used to so great an extent a century or more ago. In regard to natural resources, the United States is more fortunate than the nations of South America, or of any individual state in Europe. The distinction of the cultural achievements of present-day United States is based in part on



46 Hopi and Navaho Dwellings

These two types of Indians live in lands adjoining, yet the similarity of the geographical environment does not lead to similar types of dwelling structures. The Hopi house of adobe is like a modern apartment house, while that of the Navaho is a one-room dwelling made with a framework of boughs with a light covering of sticks, grass, and earth. (Based on pictures in the eighth and seventeenth *Annual Reports* of the U.S. Bureau of Ethnology.)

nature's gifts found in her geographical location.

But whether culture uses the materials presented to it is another question. The presence of the material is no guarantee that it will be used by a people, no matter what the biological inheritance of the race may be. Before the discoveries which made agriculture possible, the people used the fertile plains of the river valleys only for hunting and gathering herbs. There are peoples who live where clay is suitable for pottery, but do not make it. The caribou was not domesticated by the Indians of America, as it was by the Lapps of Europe and by the Chukchi of Asia. The Indians lived over the Mesabi iron range, but never used the iron ore beneath them. In colonial times the iron ore of the Appalachians was smelted by the use of charcoal made from wood, although coal suitable for making coke was abundant. It is only since the latter half of the nineteenth century that Americans have been using aluminum, although the bauxite is common.

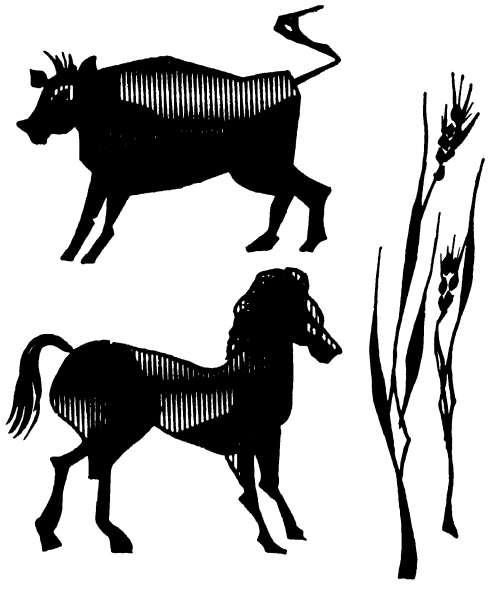
An instructive example of the failure of a people to take advantage of available materials is afforded by the Onas of South America.[4] In this respect they may be contrasted with the Eskimos. Here are two peoples living in cold environments, the one to the north, the other to the south. The Eskimos have made a most satisfactory adjustment to their environment. They have good houses and a complete wardrobe. Indeed, the latter surpasses that of most civilized peoples of the past. The Onas, on the other hand, go partially naked, and lacking adequate shelter, seek unsuccessfully to keep warm before an open fire. Yet the Onas hunt the guanaco, the skin of which is suitable for clothing. In trying to account for the backwardness of these people, then, geographic conditions are not to be emphasized.

Moreover, materials presented by nature may be utilized, but nature does not determine *how* they will be used. A large part of the world possesses domesticated cattle but not all people use the meat or milk. In China no animal was milked. The Negroes of Africa do not make cheese, and use butter as a cosmetic but not for eating. In the latter part of the nineteenth century Americans used coal only as a fuel, but the Germans were using it also for dyes and perfumes.

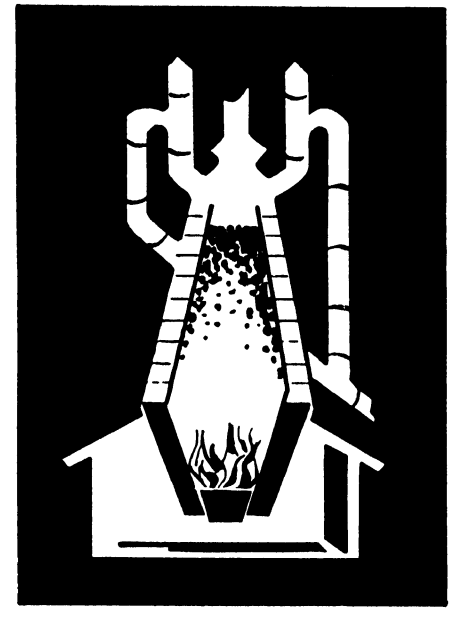
The earth gives us materials, but what causes them to be used is the presence of invention or scientific knowledge about their use, plus a favorable attitude on the part of the folkways toward their use. The presence

[4] E. Lucas Bridges, *Uttermost Part of the Earth* (New York: E. P. Dutton & Co., Inc., 1949).









47 Natural Environment and Culture

Additions to the superorganic have come from different geographical areas. (1) Primitive hunting cultures, such as the prehistoric one pictured here, now exist in only a few remote and isolated places — the rain forests of Eastern Bolivia, the semi-deserts of Australia, the Arctic North, the remote southern tip of South America, etc. The early agriculturalists conquered the primitive hunters, or agriculture was taken over and supplanted the hunting culture. (2) The Neolithic culture of Eurasia with cattle and dairying which produced proteins and grass seeds which could be stored came from Western Asia. (3) Early civilizations appeared first in highly fertile lands, usually river valleys such as those of the Nile, the Tigris and Euphrates, and the Indus. Shown above is the Ziggurat at Ur, an ancient city on the Euphrates. (4) Modern great powers are found where there is proximity to coal and iron, as in the United States, Germany, and England. Iron may be reduced from its ore in a blast furnace, which in turn may utilize coal as fuel.

of the materials does not, *ipso facto,* bring the knowledge of their use. Neither does biological inheritance. The inherited ability of the Germans did not change from the time in which they used coal for fuel, wasting the by-products, to the time when they founded a great chemical industry on these by-products. The knowledge of how to use materials grows out of previous cultural knowledge.

Geographic Factors in the Evolution of Culture

The fact that different parts of the earth have materials for culture to use has led to different cultures. For instance, extensive flat grazing lands where there were large herds of cattle led to a nomadic life, often with an effective military organization and a culture with a strong masculine domination. On the other hand, the hoe culture of the river valleys and mountain sides gave rise to villages and a sedentary life. The position of women who cultivated the soil was generally higher. In this manner has there arisen a differentiation of culture traits in different parts of the world. As transportation developed, these different culture traits spread, so that a group could have the advantage of inventions made in other localities. Domesticated cattle were adopted by the agriculturalists and farming methods were taken up by cattle breeders. Inventions spread from the locality where they originated. The chicken was domesticated in southeastern Asia, but has spread to all parts of the world. Southeastern Asia has tobacco, which came from America. Geographical location has furnished the basis for various cultures which have later been compounded, to the great advantage of the development of the superorganic.

Influence of climatic changes on the early stage of culture. An interesting question in regard to climate and the evolution of the superorganic is whether climatic change during the long history of man has been a factor in the growth of culture. It was stated in a previous paragraph that the growth of culture in the Americas since 1492 could not be attributed to changes of climate, since there had been no significant climatic change. But over a much longer time, climate and geographical conditions have changed greatly. It is well known, for instance, that the climate of Europe has changed during man's residence there. Four times during the past half-million years, more or less, the upper half of Europe has been covered by glaciers. At times central Europe has also been subtropical. England was once joined to the Continent, and the Mediterranean Sea was two lakes. At one time the Sahara Desert was fertile and covered with green vegetation.

Climatic changes have sometimes profoundly affected the culture of an area, even if they have not affected the growth of the superorganic as a whole. Thus the Sahara Desert today can support only a culture involving transportation, but little settlement.

In these early geologic times, the way in which climatic changes affected the growth of the superorganic is not known. It may be observed that the climatic changes were slow. Glaciers recede only a few feet a year. The rise and fall of the earth's surface is gradual. Occasionally a volcanic mountain island has been thrown up rapidly and lands have disappeared quickly into the sea, but these are exceptions. If the change of climate is very slow, its effect on the superorganic development would appear to be slight. Occasionally, however, slight changes of climate do affect the superorganic. For instance, when the rainfall is very light, as in the semi-arid region of the southwestern part of the United States, and springs are few, a slight lessening of precipitation dries the springs and makes food scarce. The inhabitants are forced to move, even to abandon towns and villages. Such is the interpre-

tation of abandoned villages and towns in this region. Yet for inhabited areas where the rainfall is, say, 45 inches, a yearly fluctuation of a few inches makes little difference. In spite of exceptions, the changes of climate during geologic time are not likely to have been of great significance in the growth of culture, any more than marked variation in climate from one region to another explains the differences in the civilizations in those regions today. What needs to be particularly noted is that the superorganic has had its greatest development since the recession of the last glacier. Its growth has been especially rapid since the period of written history, during which the amount of climatic change has been relatively insignificant.

Cultural level and dependence upon geographical conditions. The lower the cultural level of a people, the more dependent they are on prevailing geographic conditions. Primitive hunters dwelling in caves, without domesticated animals and with only stone weapons, live close to nature. They do not have the skill to change it. Their manner of life is nearer that of the animals than that of modern human beings. As they learn to build houses, to heat them, to sow seeds, and to reap harvests, they are freed from limitations of physiographic factors. Increasing enrichment of culture means increasing liberation of man from the clutch of climatic circumstance. Under the demand for air bases and defenses, the military settlements of the polar North and of the Antarctic have a manner of living indoors with the comforts of the civilization of the temperate zones; so great is the conquest of culture over climate.

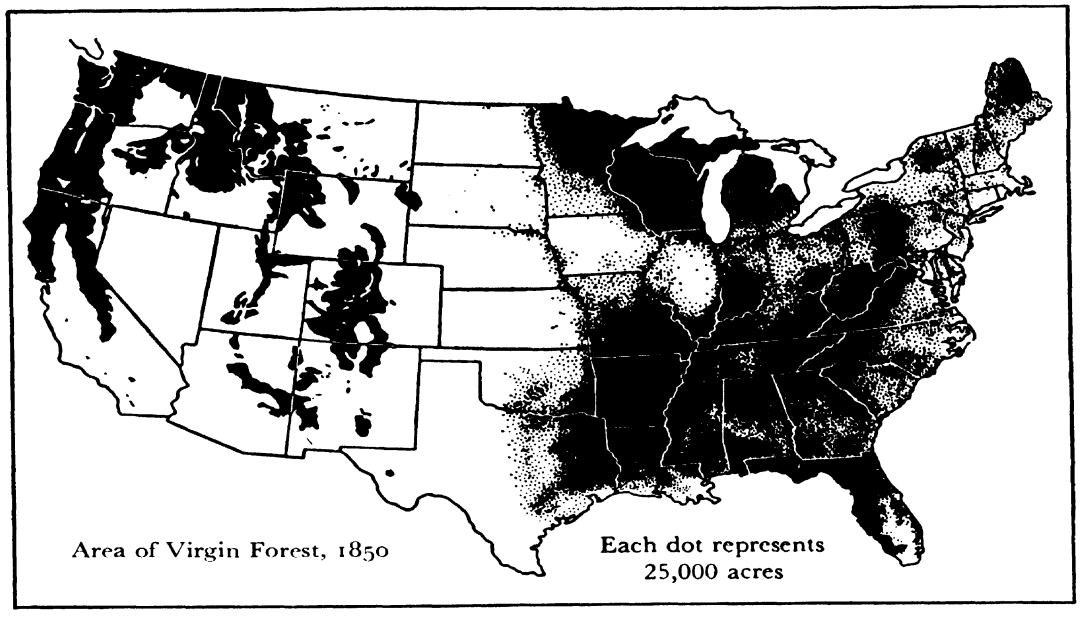
INFLUENCE OF CULTURE ON GEOGRAPHY

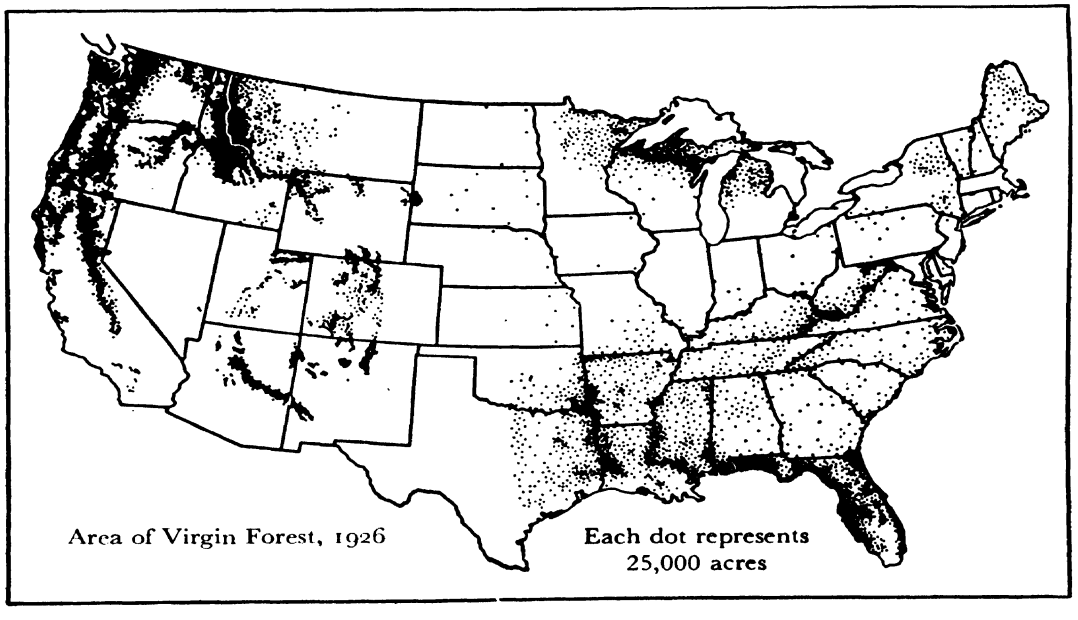
The furthest extreme to which culture has freed man from the limitations of geographical environment is the modern city. The houses are heated in winter and cooled in summer. Shelter is provided in transportation vehicles. The streets are cleaned of snow. Most of the activity is indoors. Weather means less to the city man than to the farmer, and less to the farmer than to the hunter. Man lives less like a wild animal in the city than in any other habitation he has yet had.

Artificial heating is an invention that man has used for a long time to push back the limits of climate. Now he is learning to produce cold. Artificial cooling may aid in extending the cultural advance into the tropics. The knowledge exists in our culture to create in a small space any kind of climate desired. Artificial sunlight, moisture, dryness, any degree of temperature, any proportion of daylight or darkness, strong winds or gentle breezes, man can produce. He can, if he wishes, supply the climate of the polar regions or that of the hot dry desert, but at a price. As Bowman suggests: "Man can build a comfortable and well-lighted city and provide education, opera, and games at the South Pole, or build an artificial, rain-compelling mountain range in the Sahara at an expense equivalent to that of cutting a few Panama Canals. But will it pay?" [5] It may be concluded that the limits imposed by natural environment are not insuperable and that they are being changed by science and technology.

Culture not only pushes back the limits of geographical conditions, it actually changes them. The cutting down of forests increases floods. The maps in Figure 48 show such man-made changes in environment: the decrease of the area under virgin forest in the United States in three quarters of a century. Cultivation of the hillside may destroy the soil through erosion. The dust storms which

[5] Isaiah Bowman, *Geography in Relation to the Social Sciences* (New York: Charles Scribner's Sons, 1934), p. 164.





48 Effects of Culture on Natural Environment

The decrease in the area under virgin forest in the United States in three quarters of a century. Reproduced on a reduced scale (approximately 1:50,000,000) from the Atlas of the Historical Geography of the United States, Carnegie Institution of Washington and the American Geographical Society of New York, 1932. (From Isaiah Bowman, *Geography in Relation to the Social Sciences,* 1932 edition, New York, Charles Scribner's Sons, 1934, p. 35.)

are turning sections of our grazing lands into deserts are caused by man, who has plowed up the grass roots that formerly bound the soil.

The soils of the earth, however, can be reconstructed as well as depleted, as farmers do yearly. The Grand Coulee Dam in eastern Washington creates a lake that makes a desert bloom. Lakes may be formed and deserts made fertile. It is now possible to clear away fog from an airplane landing field, and also to extend vision through a fog to a much greater distance. For a long time we have known that reforestation will increase precipitation of moisture, but now we can produce rain over a given spot with the help of an airplane, a little dry ice, and a few clouds. The production of rain may evolve into a most useful art. We may conclude that the further development of culture will furnish man in part with an artificial substitute for his natural environment.

SUMMARY

This chapter has assessed the significance of natural environment for man and his culture.[6] A review of the relationship between geography and race revealed that the former may play a part in the modification and selection of bodily structure, but what significance for culture this may have, we are not sure. It would seem, too, that a plausible relationship might be established between energetic behavior and certain kinds of climate, but convincing evidence is lacking that such climatic stimulations of energy are responsible for the growth of culture.

The fact is that in the growth of culture, "we have no evidence of a creative force of environment." [7] The culture of a region may change profoundly while the geographical conditions remain constant. Manhattan Island today has a social heritage quite unlike that of the inhabitants whom the white man displaced. Also, two or more groups may live in the same general region, yet show greatly divergent patterns of behavior, as was shown for the Hopi and the Navaho.

Geography does play an important role in furnishing materials for culture. It does not dictate what materials shall be used. The reindeer was domesticated by the Lapps, but not by the Eskimos, among whom it was first introduced by the American government. Nor does geography dictate how materials shall be utilized. Cows are used for meat by some peoples, for milk by others, and exclusively for religious purposes by still others. The use of the material furnished by nature depends on the existing state of knowledge and the point of view of the prevailing folkways. As the culture expands, new materials of nature are utilized. Waterways served as transportation routes when the boat was invented, and now the air is the route for the dirigible, balloon, the airplane, and the helicopter.

Man is, of course, an organism adapted to nature. As such, he is ultimately dependent on his geographic environment. Wide fluctuations in geographical conditions set limits. However, given relative stability of natural conditions, such as man now enjoys, he can become master of his natural environment rather than remain its slave. Man's growth in knowledge has allowed him to escape in part from the controls of nature to which other animals are subject, and even to substitute increasingly an environment of his own devising. In the life of man the major emphasis deserves to be placed on the cultural rather than the natural environment.

[6] The role of geography in affecting the location, size, and functions of communities is considered in Chapter 13.

[7] Franz Boas, "The Aims of Anthropological Research," *Science*, 76: 605–613, 1932.

QUESTIONS FOR DISCUSSION

1. Does climate affect races and, through races, influence societies?
2. Are there variations in social life because of variations in energy in different climates?
3. Are the temperate zones more favorable to the development of civilization than other regions?
4. What is the role of geography as a supplier of materials for culture?
5. Why do we say geography is a limiting rather than a creative factor as regards the superorganic?
6. Is the geographical location of a community today less important or more important than it was a century ago? Why?
7. In what ways has culture changed the natural environment?
8. What are some of the effects of air-conditioning on man's relation to the natural environment?

TOPICS FOR REPORTS

1. A comparative study of the cultural similarities of two peoples living under dissimilar geographic conditions.
2. A comparative study of the cultural dissimilarities of two peoples living under similar geographical conditions.
3. The various uses of the cow in different cultures.
4. The effect of seasonal variations upon human behavior.
5. The Mayan civilization and its geographic setting.
6. The adjustment of the white man in the Canal Zone.

SELECTED READINGS

BRIGHAM, ALBERT PERRY, *Geographic Influences in American History.* Boston: Ginn and Company, 1925.

For a particular area, geographical conditions require adaptation which shows up in history. Thus climate was favorable to growing cotton in certain states, which in turn was a factor in slavery and in war. This book deals with such geographic influences.

GOLDENWEISER, ALEXANDER A., Anthropology: *An Introduction to Primitive Culture.* New York: Appleton-Century-Crofts, Inc., 1946.

Chapter 5 contains excellent brief comments on the limitations of environmental influence on cultural development.

HUNTINGTON, ELLSWORTH, *Civilization and Climate.* New Haven, Conn.: Yale University Press, 1924.

The extreme position for the geographer, expressed in the diction of science.

LINTON, RALPH, *The Tree of Culture.* New York: Alfred A. Knopf, Inc., 1955.

This book does not deal with geography as such but describes the growth of regional cultures over the world. Still, it is easy to see in such a comparative study that geography has been a conditioning factor and that without the conditions, certain inventions would not have been made.

LOWIE, ROBERT H., *Culture and Ethnology.* New York: Douglas C. McMurtrie, 1917.

Chapter 3 on culture and environment contains an excellent critique of the environmental interpretation of cultural growth.

MILLS, CLARENCE A., *Climate Makes the Man.* New York: Harper & Brothers, 1942.

A collection of extraordinarily interesting essays on a wide variety of topics. The conclusions are suggestive rather than definitive and emphatic rather than accurate.

PEATTIE, RODERICK, *Geography in Human Destiny.* New York: George W. Stewart, Publisher, Inc., 1940.

Interestingly written and rich in suggestion which makes the interpretation of history more interesting.

SEARS, PAUL, *Deserts on the March.* Norman, Okla.: University of Oklahoma Press, 1935.

A very timely book written when we were impressed with the growth of the dust bowl in the United States.

WALLIS, WILSON D., "Geographical Environment and Culture," *Social Forces,* 4: 702–708, 1926.

Another brief critique of the geographical influence.

Part Three:

Group Behavior

Sociology as the study of social relations is primarily concerned with groups. A man cannot be social by himself unless he has previously lived with others.

In Part III we undertake to examine systematically certain aspects of group behavior. We are interested in knowing how groups arise and become cohesive. These topics are treated in Chapter 6 under the heading "Group Integration." One of the principal factors in the cohesiveness and stability of groups is organization, which consists in part of a system of interrelated social roles. These diverse roles are, moreover, ranked by the group in terms of status. Because roles and status are so important for the conduct of the group, and especially its stability, Chapter 7 is devoted to these two correlated phenomena. But situations arise, especially in a changing society, where the norms underlying social organization are not applicable or effective. In such situations, the controls that usually restrain extreme behavior are inoperative, leading to crowd behavior. Or if there is confusion because of a new issue confronting the group, a period of group unrest may ensue, accompanied by group discussion, until public opinion crystallizes in new cultural directives. Sociology must reckon not only with culturally organized group behavior but with group behavior when tradition breaks down or is challenged or is reformulated; hence Chapter 8 on "Crowds and Publics." A certain amount of social unrest, and challenge to the social order, is permitted; but the group tries to limit deviation from the established norms. How it undertakes to do so is considered in the concluding Chapter 9 on "Social Control."

6

Group Integration

Some years ago the noted French sociologist, Emile Durkheim, discovered that different groups vary in the frequency with which their members destroy themselves. The suicide rate is generally higher among Protestants than Catholics; higher among army officers than among noncommissioned men; higher among single than married people. How account for these important differences?

Durkheim sought the explanation largely in terms of what he called group solidarity.[1] Both the Protestant and the Catholic religions condemn suicide; but the Protestant rate is higher, thought Durkheim, because Protestants are more individualistic; are not tied so closely together in the group (church) as are Catholics; do not depend so much upon the church for direction. Unmarried persons are also more isolated and less identified with a group than married persons. But Durkheim was confronted with another problem. How explain the ceremonial suicide (hara-kiri) of the Japanese? There are, said Durkheim, several types of suicide. Hara-kiri is an instance of what he termed *altruistic suicide.* Here the members of the group are closely integrated, but the teachings of the group say that under certain circumstances self-destruction is more honorable than survival. The more common differences in suicide rates, like those between Protestants and Catholics, and unmarried and married persons, he described as differences in *egoistic suicide,* where considerations of self prevail against the dictates of the group. Durkheim noted also that in times of rapid change, as in economic depressions, suicide increases. Because there are periods when the norms of the group are confused, Durkheim called such suicides *anomic* (from *anomie,* meaning "normlessness"). In short, Durkheim thought he could account for differences in rates of all types of suicide in terms of differences in group integration. Later researches have in general confirmed Durkheim's factual findings. It is also generally conceded that Durkheim's explanation in terms of group integration focuses on a highly significant factor.

It is interesting, parenthetically, to note that Durkheim was able to achieve group integration as well as to investigate it: he was an inspiring teacher whose students were devoted to him and to one another. Marcel Mauss, another distinguished sociologist, was one of the group that Durkheim taught. Mauss identified himself closely with the group; and when his colleagues died, he took over their labors and completed their unfinished work, at the sacrifice of his own work. He edited, completed, and published the manuscripts left by Durkheim, Hubert, Hertz, and others. He revived the *Année Sociologique,* which he had helped Durkheim establish.[2]

[1] Émile Durkheim, *Le Suicide: étude de sociologie* (Paris: F. Alcan, 1897); American edition trans. by J. A. Spaulding and G. Simpson (Glencoe, Ill.: The Free Press, 1951).

[2] Introduction by E. E. Evans-Pritchard to Marcel Mauss, *The Gift* (Glencoe, Ill.: The Free Press, 1954).

THE NATURE OF INTEGRATION

We want to know what group integration is, how it is achieved, and the factors increasing or decreasing it. But because integration is a group phenomenon, we need first to know why and how groups are formed. When we have this knowledge, we can then undertake to learn what accounts for different degrees of cohesion.

Why and how groups are formed. A simple statement is that groups are formed in order to satisfy human needs. A basic need is survival, and the family is an illustration of a group which serves to meet this need, for without the help of others the human infant would perish. Groups also provide many activities which would not be possible to a lone individual. It takes twenty-two men to play football, and it takes many thousands to support grand opera. We derive so many satisfactions from groups that group affiliation itself becomes precious to us. We want to feel that we belong to certain groups and that these groups accept us. In this way groups provide us with security and fellowship.

Groups arise when two or more individuals interact. The essence of group life is interstimulation and response or communication, which consists of mutually understood symbols such as facial expressions, gestures, and words.

Some groups, like the gathering of a crowd at the scene of an accident, are quickly formed and soon dissolved. Other groups, like families, last many years. What we want to explore in this chapter is why some groups are more cohesive than others.

What integration is. For a group to endure, the members must remain together. Stability, then, rests on integration; and integration is "the total field of forces which act on members to remain in the group." [3] Integration is the process of producing an integer, or a single unit, out of separate parts. It is therefore a process of organization. When individuals turn against a group and withdraw from it, we sometimes refer to the process as alienation. When they are denied admission to the group, we speak of segregation. Essentially this same phenomenon of group integration was referred to by the early French sociologists as group cohesion or group solidarity. These qualities in groups are generally admired, because they are thought to result in greater social efficiency and human satisfaction.

Group integration, then, refers to the ties which the members have one with another. These ties vary in intensity from one group to another, so that we speak of highly integrated and loosely integrated groups. Actually there are not just two polar types but various degrees of integration. And since integration refers to one or more ties, it may be high in some respects, loose in others; for example, a family may be highly integrated with regard to economic production and loosely integrated with regard to affection, or vice versa. The Negroes in the United States are more closely integrated into the economic life of the white community than the social life. These considerations raise the question whether we can correctly use the phrase "group integration" as a unitary concept. A unitary concept of cohesiveness is acceptable only when the different aspects of cohesiveness are highly correlated, which is sometimes not the case.[4]

COMPONENTS OF INTEGRATION

Mechanical and Organic Integration

Interdependence resulting from division of labor is an integrating factor. What we have to consider now are the factors that cause individuals to remain in

[3] Leon Festinger, Stanley Schachter, and Kurt Back, *Social Pressures in Informal Groups* (New York: Harper & Brothers, 1950), p. 164.

[4] Neal Gross and William E. Martin, "On Group Cohesiveness," *American Journal of Sociology*, 57: 546, May 1952.

the group instead of withdrawing from it. Let us use the illustration of the family. What is it that determines whether men and women, having married, will stay married? One of the factors is the adequacy of the division of labor between husband and wife. For while marriage is a sexual relationship, it is also an important economic relationship, a generally effective arrangement for satisfying the needs for sustenance and survival. Picture the situation among primitive hunters like the Eskimo, where the conditions of life are precarious. The men do the hunting of the large animals, the walrus, the seal, and the polar bear; and they leave on this mission early in the morning. When they return later in the day, they are hungry, tired, wet, cold. They return to their igloos where their wives have a hot meal waiting for them and supply them with a complete change of clothing. The women take the stiff leather garments and spend long hours chewing them to make them supple. If the weary men, on their return home, had to do these things for themselves, they would be hard pressed; survival would be made more difficult. On the other hand, the women would be hard put to it, too, if in addition to all their household chores they had to do the hunting. Division of labor is a device for getting many types of work done more efficiently. And the work is generally done better by those who become expert in it because of specialization. But from the standpoint of group integration, the point to be noted here is that division of labor results in interdependence. The members of the group need each other, and the mutual need ties the group together. Durkheim called this type of integration, resulting from division of labor, *organic* integration.* Another type, which exists when individuals engage in similar rather than differentiated labor, he called *mechanical* integration. Organic integration of Negroes into the white households of the South was accomplished by using the Negro men and women as domestic servants and as field workers, representing a division of labor along racial lines. But when whites and Negroes work side by side and do the same jobs, the integration is mechanical. The same is true when they share the same educational or other facilities.

* In the first printing of this edition of *Sociology*, the definitions of "mechanical" and "organic" integration were inadvertently reversed.

Normative Integration

Consensus on "rules of the game" is a unifying force. Animals other than man participate in a division of labor which serves to integrate their group life. Thus ants have a highly organized social life built around the division of labor. But man is the only animal with a substantial culture, and the culture may be an integrating factor in group life. Especially important in this regard are the group norms, which regulate conduct by setting up expectations of how individuals are supposed to behave. The division of labor of the Eskimo men and women is, of course, prescribed by the culture. There are established notions about women's roles and men's roles. But there are other norms than those of division of labor which affect the relationships of Eskimo men and women and which tend to bind them together more firmly than would be the case if there were no such norms. Such, for instance, are the norms governing sexual activities, which prohibit promiscuity.

What we are saying is that if there are rules of the game, and the rules are adhered to, the activity of the players will be more closely integrated than if they try to play without rules or do not conform to them. When there is agreement on opinions or values, we say there is *consensus*. Consensus is then a measure of integration; since consensus is a matter of degree, scales can be devised to measure the extent to

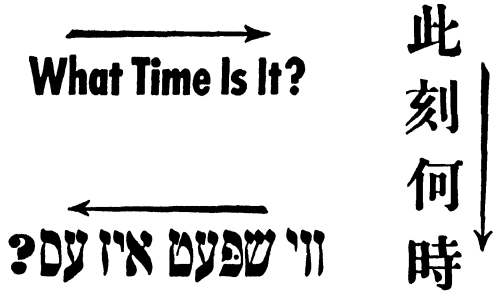
which a given opinion is held by the members of a group.[5]

The preferential feeling which members of a group have for their own culture, referred to as ethnocentrism, is a cohesive factor in group life. There is a general tendency to regard one's own associates as the chosen people, one's culture as the best of all cultures, and one's community as "God's own country." The best fraternity is usually one's own. Many colleges have "the finest campus in the country." As Oliver Wendell Holmes observed, "The axis of the earth protrudes through the center of each and every town."

Even as favorable self-regard is an integrating factor in personality, just so the positive group conception involved in ethnocentrism helps to make the group cohesive. Observation of the behavior of individuals in different societies suggests that ethnocentrism is stronger in relatively stationary, isolated societies than in groups characterized by high rates of mobility and change. Contact with cultures other than one's own may produce a xenocentric view in which a culture other than one's own is preferred; or such contact may lead to cultural relativism, wherein each society is evaluated in terms of its own circumstances and values.[6]

Are some value systems more highly integrating than others? High consensus with respect to any set of norms tends to integrate a group more than low consensus, but are some norms more integrating than others? This question arises in connection with the problem of whether democratic leadership is more highly integrating than dictatorial leadership. In a well-known experiment[7] using boys' clubs, groups with democratic leadership showed less friction than groups with autocratic leadership. Friction or lack of solidarity was measured by the relative number of remarks in which "I" was used rather than "we," the number of friendly and unfriendly comments, and the number of remarks indicating contentment or discontent. Does this experiment show that dictatorial leadership *per se* causes more dissatisfaction or that it caused more discontent in certain American groups under certain conditions? The United States is a country with democratic traditions, and dictatorial leadership is, generally speaking, anathema. Was dictatorial leadership so disturbing in Nazi Germany?

[5] M. W. Riley, J. W. Riley, Jr., and M. L. Toby, "The Measurement of Consensus," *Social Forces*, 31: 97–106, December 1952.



49 Ethnocentrism in Regard to Handwriting

English writing is from left to right, Chinese is from top to bottom, while Yiddish is from right to left. When asked to choose which was the best method, Americans thought, of course, that writing from left to right was best. (G. F. Deutsch, *Conformity in Human Behavior with a Test for Its Measurement*, Master's thesis. Columbia University Library, 1923.) Actually, in training children to write, the advantage seems to be somewhat with the Chinese method of writing from top to bottom. This tendency for the group to think the things it does are the best is found also in fashions, morals, manners, law, and even sometimes in material culture.

[6] Donald P. Kent and Robert G. Burnight, "Group Centrism in Complex Societies," *American Journal of Sociology*, 57: 256–259, November 1951.

[7] Ralph White and Ronald Lippitt, "Leader Behavior and Member Reaction in Three Social Climates," in D. Cartwright and A. Zander, *Group Dynamics* (Evanston, Ill.: Row, Peterson and Company, 1953).

50 Free Speech: Hyde Park, London

Hyde Park, London, where radicals without hindrance harangue assembled crowds, is a symbol of the discipline of the English. The bobby in the picture is unarmed. The English are a highly integrated nation, owing in part to their homogeneity, relatively small size, and devotion to traditions, such as the preservation of individual liberty. (Picture from *New York Times Magazine*, January 22, 1956, p. 9.)



The efficacy of values as integrative forces depends on the nature of the behavior to be integrated. If the objective, as in a parliamentary body, is to arrive at determinations of policy which will work and will be acceptable to those to whom it applies, then relatively free and unrestricted discussion under democratic leadership is usually more effective than dictatorial edicts. But if the problem is to train an army that will make an effective fighting force, some limitation has to be placed on the participation of the soldiers in the decision-making process.

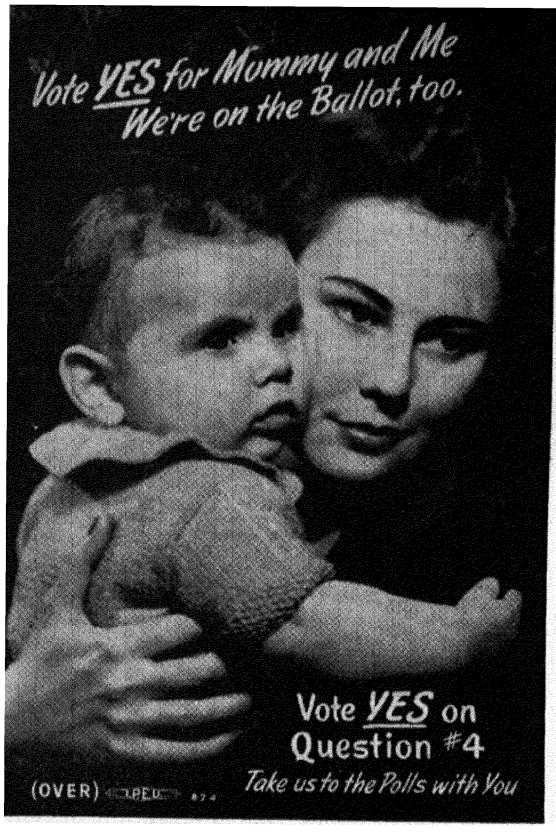
If we take a particular goal, like family integration, we can compare various value systems in terms of their relative efficacy in achieving the goal. Thus we know that the value system of the Roman Catholic Church forbids divorce and that the divorce rate of Catholics is lower than that of Protestants. We cannot conclude that the effect is greater family integration, because the Catholic Church permits annulments and separations; and there is some evidence [8] that the rate of dissolutions of Catholic marriages in the United States is not significantly lower than that of Protestants. The Mormons have perhaps the lowest rate of marital breakdown of any major religious group. So we conclude that the Mormon normative system is more highly integrative than that of most other groups, so far as family life is concerned. The stability of Mormon marriages may, of course, be due to factors other than the teachings of the church, such as income and occupational factors. And we are not saying that integration is good or bad, that integration in family life may not be bought at a high price, or that there are not other values than integration which groups esteem, like freedom and independence.

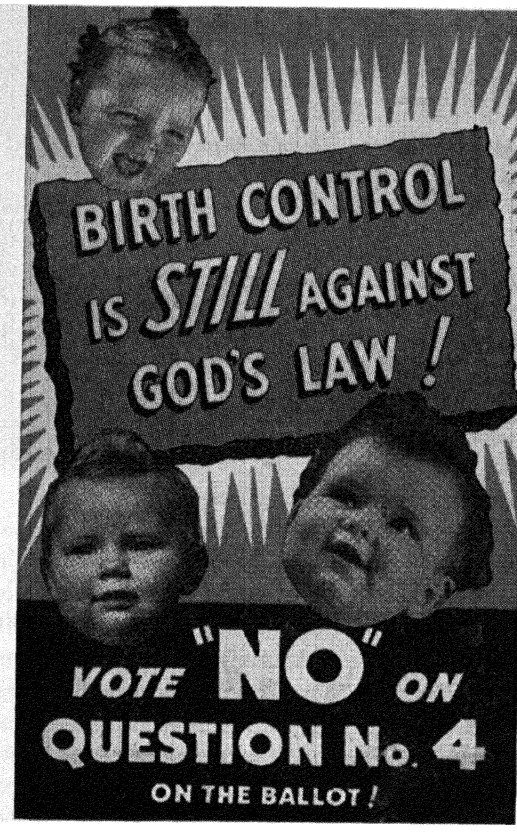
Preceding paragraphs have shown that group cohesion is fostered when members satisfy one another's important needs and when they agree on social values. Study [9] of group cohesion in informal groups of air force personnel shows that when integration is achieved through reciprocal need satisfaction, the group tends to be symbiotic, that is, made up of unlike individuals, whereas if integration is consensual, the group is more likely to be composed of like individuals.

Normative consistency fosters integration. A group tends to be more highly integrated if its norms are consistent, for if they are not, the members may work at

[8] William J. Goode, *After Divorce* (Glencoe, Ill.: The Free Press, 1955).

[9] Edward Gross, "Symbiosis and Consensus as Integrative Factors in Small Groups," *American Sociological Review*, 21: 174–179, April 1956.





51 Lack of Consensus on Norms Is Divisive

The Roman Catholic Church opposes family limitation via artificial contraception, whereas a number of Protestant denominations favor it. The pro and con leaflets above are from the campaign in Massachusetts in 1948 when the issue was submitted to the voters. The existing law in Massachusetts which prohibited the dissemination of contraceptive information by physicians was retained. Religious symbols, when shared, are the source of greatest group integration, and religious differences the source of some of the deepest divisions, because religious values are ultimate values and differences in irrevocable values are of necessity not subject to compromise. (Material from Planned Parenthood League of Massachusetts.)

cross-purposes. Karen Horney has observed that the culture of the United States embraces a number of contradictory teachings such as those of Christianity extolling altruism and self-sacrifice, whereas the economic system encourages self-seeking and personal success. These and other conflicts are developed more fully in another chapter,[10] where it is shown that, although the group as a whole tolerates these inconsistencies reasonably well by a process of compartmentalization, which avoids the conflict inherent in the incompatible values, not all individuals are successful in achieving such compartmentalization.

Discipline unites the group. Among the values that tend to integrate a group and make it resistant to disruption, high priority must be assigned to discipline. The presence of discipline, especially courage and persistence in critical situations, is often

[10] Chapter 11, "Culture and Personality."

notable in groups showing unusual integration.[11] Thus one is impressed by the marked integration of the British nation in the middle of the twentieth century. This solidarity was shown especially in time of deep crisis in World War II, when the island was under heavy air bombardment by the Germans, when the disastrous retreat at Dunkirk had occurred, and invasion appeared to be imminent. Their great war leader promised only blood, sweat, tears; but there was no collapse, only greater effort and greater unity. The reasons are many, but prominent is the fact that the British are a disciplined people. You see the discipline in the queues that form at the bus stops. Each person takes his proper place, and there is no crowding and pushing. You see the discipline in the austerity program with reduced imports and increased exports, and with rationing and the going without, in order to bring the economy into balance, while other nations in similar difficulty do not make comparable sacrifices. You see the discipline of the English in their characteristic practice of understatement, a form of self-control. You see it in the efficiency and honesty with which their welfare programs, especially the health insurance schemes, are administered. The authors of this book on the occasion of a visit to a European country where only a partial system of health insurance is in effect asked governmental officials why all the expenses of medical care were not provided in that country as in England. Because, said one official, we cannot trust our people the way the British can. Our people will feign illness and bribe the doctors to get benefits to which they are not entitled. An English child is taught from infancy to be honest; but our children early learn to be deceitful and evasive, because our emphasis is on punishment for wrong-doing rather than on reward for good behavior. Whether his analysis was sound or not, he was commenting on an important difference in the normative systems of two cultures.

[11] R. B. Cattell, Chapter 2 in Cartwright and Zander, *op. cit.*

Social Psychological Integration

Our discussion has shown that integration may involve agreement or consensus on group norms. Consensus is, of course, a social psychological phenomenon. But more than consensus may be involved in integration. As the example of the British showed, there is also present a feeling of satisfaction because of the consensus. This feeling of satisfaction is sometimes referred to as morale. It is this experience of morale that we wish to consider next.

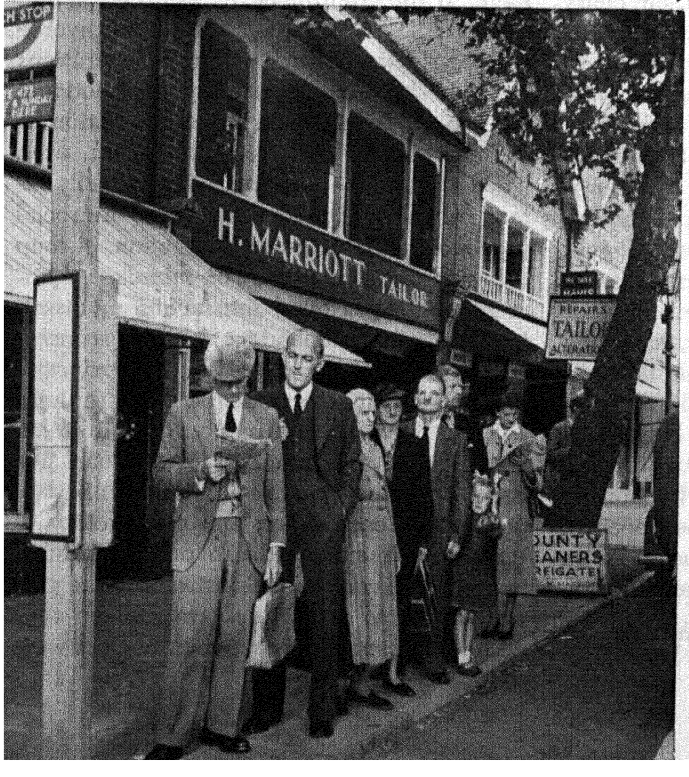
Husband and wife are, we have seen, held together in part by their economic dependence upon each other and in part by the teachings of the culture regarding appropriate marital behavior. Especially important are ideologies of the nature of marriage. If the group believes, as do Catholics, that marriages are indissoluble, then divorce will be relatively rare, although separations may not be. The possibility of emotional divorce (that is, psychological alienation of the marital pair one from the other), even when the marital bond remains formally intact, introduces the idea that there are social psychological factors in integration. Group cohesion depends in part on *morale*, a sentiment built up around satisfaction or dissatisfaction. Interdependent activity, consensus, and morale are, in sum, the principal factors affecting the integration of groups.

There have been a number of studies to show that if the members of a group like each other, the morale is better than if they do not like each other; and the stability of the group is enhanced. In one experiment in a juvenile correctional institution, the girls were asked to name those with whom they wished to room; and when their choices were



Photo by Hansel

Picture Post Library



52 Queuing Up

In the United States it is customary to form a line while waiting for tickets to the movies but not, as in England, while waiting for a bus. Queuing up involves social discipline and is an effective democratic method of social organization.

granted, the amount of disturbance in the institution decreased. The introduction of an undesired girl into the group produced tensions in the group, and the introduction of a second undesired member produced disproportionately greater disturbance.[12] Many groups in our society, like fraternities, are based on the principle of selective or preferential association, with a single blackball in some instances being sufficient to exclude a candidate. The theory is that, in the realm of one's social life, one should be free to choose one's associates, and the group so freely chosen will be more congenial and more highly integrated than one where choice does not exist. These observations raise some question regarding the practice in a number of colleges of drawing roommates by lot or having them assigned by the administration. These procedures may be dictated by considerations of democratic theory or by practical considerations, such as what to do with the students whom nobody chooses to live with. If the wishes of the students are ignored, there is likely to be some loss of group integration, although there may be compensating gains.

Sociometry: the measurement of group attraction and repulsion patterns. The measurement of the attraction and repulsion patterns of groups (that is, who likes whom), which has come to be known as *sociometry,* has been carried quite far; and a considerable body of literature has accumulated on the subject. It is mainly concerned with the investigation of small groups and constitutes a sort of microsociology. One limitation is its relative neglect of the mass society in which we live in the middle of the twentieth century. The small groups are treated as closed small systems without due regard for the larger system, which is to say that in the concentration on social psychological problems, the cultural factor is often neglected.

[12] J. L. Moreno, *Who Shall Survive?* (Nervous and Mental Disease Publishing Company, 1934).

There is a circular or cumulative effect of group liking on group solidarity. The more members like each other, the more they will tend to do things together; and the doing things together, agreeably, further intensifies the liking.[13] In a study of data gathered by questionnaire from 5,871 production workers of a machinery factory, it was found that group integration was facilitated by the liking of group members for each other and by the opportunities for interaction. Such opportunities were affected by the size of the group the workers formed and the duration of the groups.[14] The implications of this study are that if you wish to increase the solidarity of a factory group, it will help if the individuals who work together like each other and have opportunity for continued interaction.

To increase the morale of a group it is not necessary that the members be self-chosen or mutually chosen, although, as we have just seen, that does help. Close integration can also be achieved when the members of the group are chosen by an outsider, provided that the membership in the group gives the individuals a sense of special importance or distinction. Thus morale in the Marine Corps is generally acknowledged to be exceptionally high. This is achieved in part by more rigorous selection of candidates for the Corps than for other branches of the service, in part by more rigorous training and discipline, and in part by normative factors, that is, the Marine Corps tradition with which each recruit is indoctrinated.

In April, 1927, six female operators assembling telephone relays were moved out of the room where they had worked with others and moved into a test room. Records of their output had been kept before they

[13] George Homans, *The Human Group* (New York: Harcourt, Brace & Co., Inc., 1950).

[14] Stanley E. Seashore, *Group Cohesiveness in the Industrial Work Group* (Ann Arbor, Mich.: University of Michigan Survey Research Center, 1954).

Factors making for high morale in the Marine Corps . . .

Distinctive appearance. More scrupulous observance of standards of appearance and attire for officers and enlisted men than in any other Service. Intentionally distinctive and conspicuous uniforms.

Rigorous recruit training. Weeks of physically intense, minutely supervised drills and instruction designed to serve as a challenge and give the successful recruit a sense of achievement and group solidarity with others who have passed the same tests.

High performance standards. Continual emphasis on individual professionalism and professional qualifications (e.g., Marine rifle teams usually sweep National Rifle Matches). Perfectionist approach in close-order drill. Refusal to

U.S. Marine Corps Photo



relax individual standards of behavior (e.g., relatively high criteria for award of Good Conduct Medal to enlisted men).

Special missions and tasks. The Marine Corps is the national force in readiness, and is the only Service which the President has *carte blanche* in assigning to any task (". . . to perform such other duties as the President may direct." — National Security Act). Marines guard many U. S. embassies and consulates abroad, and the Corps is the only Service which serves on land, at sea, and in the air. ". . . First to fight."

Long and distinguished traditions. Beginning with boot camp, the individual Marine is taught that the spirit of comradeship and brotherhood in arms is a vital characteristic of the Corps. Emphasis on loyalty, both to Corps and to fellow Marines (*Semper fidelis* is the Corps motto). Marine wounded are always rescued, and Marine dead never abandoned (e.g., 1st Marine Division brought down all its dead in the Chosin Reservoir march to the sea). Corps tradition to stand and fight and not to surrender or "bug out" (Marines furnished 11.5 per cent of total ground forces in Korea and yielded 3.4 per cent of the total prisoners taken by the enemy).

Corps makes maximum use of continuity of traditions, such as Corps colors, Marine Corps emblem, annual ritual celebrations (such as Marine Corps Birthday, November 10th), emphasis on teaching Marine Corps history to all hands, use of traditional phraseology (every order must be acknowledged by phrase, "Aye, aye, Sir!"). The only Service to have its own distinctive necktie for civilian wear. Emphasis that individual Marine is custodian of past traditions and has a continuing responsibility to his predecessors in the Corps.



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53 Morale in the Marine Corps

The U.S. Marines represent a group with unusually high morale and *esprit de corps*. It is very unusual to find a Marine who is not proud to be a member of the Corps. The Corps is a relatively small group with distinctive appearance, special training and tasks, unusual competence, and long and distinguished traditions which contribute to group solidarity.

were transferred. Previously they had worked under the direction of a group chief; but in the test room they worked in the presence of a "friendly observer." The six girls were given a physical examination every six weeks. Rest pauses were introduced, and their output rose. The supervisors of the test were inclined to ascribe the increased production to the introduction of the rest periods. Then the rest pauses were abolished. The output continued to rise. It then became clear to the investigators that what was increasing the productivity of the workers was not so much the changes in their working conditions as the sense of importance which the girls felt in being singled out for special consideration. They did not know why they were being studied, but they knew that they were in some way a select group, and the knowledge gave them a zest in their work which they had previously lacked. They demonstrated that high morale promotes efficiency as well as group integration.[15]

In another experiment,[16] a prestige hierarchy was established, with some men given the authority to tell others what to do and how to do it. Of the high-status persons, some were told, "You are secure in your jobs," while others were told, "You may be changed to a lower status later." Some low-status persons were told, "You will not be allowed to rise," whereas others were told, "You may be promoted." Measurements indicated that those most attracted to the group were the high-status persons who were told they would be secure in their jobs and the low-status persons who were given the assurance that they might be promoted. This study indicates that, in our culture, security in an already satisfactory status, or the prospect of advancement for those in low positions, makes for high morale and group integration.

Reference groups, relative deprivation, and morale. If we revert to the experiment of the girls who assembled telephone relays, we note that their satisfaction was in large part the result of comparisons they made between their status in the factory and that of the other girls they had left behind in the assembly room. They had been selected for a special purpose which they felt was good and added to their prestige, and the others had not. Groups which serve as points of comparison are known as *reference groups,* although the concept also has other meanings.[17] The significant point here is that we compare ourselves with others, and if the comparison is favorable, our morale rises; if not, our morale drops. The members of the faculty of the X State University may get an increase in salary which would be expected to raise morale; yet if the members of a comparable sister institution in the same state, namely the University of X, get an appreciably larger increase, the morale of the faculty of the X State University may be adversely affected. This is the phenomenon of *relative deprivation.*

FACTORS AFFECTING INTEGRATION

In the preceding paragraphs, we have analyzed integration in terms of its component parts: interdependent or common activity, consensus, and morale. We wish now to consider the factors that affect integration, that is, the factors that are associated with increasing or decreasing integration.

Let us consider some observations on a reform group which is reported to be highly

[15] C. E. Turner, "Test Room Studies in Employee Effectiveness," *American Journal of Public Health,* 23: 577–584, 1933.

[16] Harold H. Kelley, "Communication in Experimentally Created Hierarchies," *Human Relations,* 4: 39–56, 1951.

[17] Tamotsu Shibutani, "Reference Groups as Perspectives," *American Journal of Sociology,* 60: 562, May 1955.

cohesive.[18] This group was the Columbia (Missouri) Committee on Racial Equality, organized for the purpose of trying to eliminate segregation in facilities serving the public in the local community. The group met regularly, once a week, on the same night. They had clearly defined methods and goals. So there was consensus. They agreed on direct but nonviolent action. Test teams would pay a visit to a restaurant to see if it would serve Negroes. If not, the group would try to negotiate with the owner. If negotiation failed, they would resort to picketing, or a boycott, or a sit-down. Their possession of such potential power gave them confidence and led to many victories.

Size of Group

We can use this illustration as a springboard for certain observations regarding factors in group integration. One of these is size of group. The reform group described in the preceding paragraph, we are told, was relatively small — twenty to thirty persons. It is easier to integrate a small group for many kinds of activity than a large group. The reader will probably have noticed that at social affairs like teas or receptions the group tends to break up into small conversational units. When discussion groups were formed consisting of twelve members, it was found that they were more likely to break up into smaller, separate groups than when the discussion groups consisted of six persons.[19] Also there was less consensus in the larger groups. In another study[20] the function of size in small-group interaction was investigated from published data and observation of governmental and economic organizations in the United States Congress and in the state of Oregon. The mean group size of representative Senate subcommittees and of selected political and economic committees in Oregon ranged from 4.7 to 7.8.

The optimum size of group for purposes of integration varies, of course, with the type of activity. If it is a football team one wishes to build, then one would need at least two teams of eleven members each, to make scrimmage possible. A certain number of reserves are needed for replacements because of fatigue or injury. The optimum size of squad depends in part on the quality of the players and the opportunities afforded them for participation. Coaches know that beyond a certain size, squads become inefficient. Hence squads are cut early in the season.

The reasons why integration is more difficult to achieve in a large than a small group are numerous and complex, but an important factor is the number of relationships.[21] Two persons, A and B, can have only one relationship. A, B, and C can have three relationships, A-B, A-C, and B-C. In the same way it can be shown that four persons may have six sets of relationship; five persons, ten sets, and so on. The addition of an individual to a group increases the size of the group in a simple arithmetic progression, whereas the number of personal interrelationships within the group increases in the order of triangular numbers.[22] If we con-

[18] Verda and Irwin Deutscher, "Cohesion in a Small Group," *Social Forces*, 33: 336–341, May 1955.

[19] A. Paul Hare, "Interaction and Consensus in Different Sized Groups," *American Sociological Review*, 17: 261–267, 1952.

[20] John James, "A Preliminary Study of the Size Determinant in Small Group Interaction," *American Sociological Review*, 16: 474–477, August 1951.

[21] James H. S. Bossard, *The Sociology of Child Development* (2nd ed.; New York: Harper & Brothers, 1954), p. 145.

[22] If P = the number of personal relationships between any two persons and n the number of persons, the formula is:

$$P = \frac{n\,(n-1)}{2}$$

sider not just (a) as shown above, the possible relationships between any two members of a group, but (b) potential relationships between an individual or group combination, and (c) potential relationships between any group combination of two or more and any other individual or group combination of two or more,[23] the following line shows how the potential relationships increase as the number of individuals involved increases:

N =	2	3	4	5	6	7
P.R. =	1	6	25	90	301	966

If we use the family as an illustration, an example of (a) above would be the relationship between two brothers; (b) the relationship between parent (group) and children (group); (c) the relationship between individual and group — e.g., grandfather and grandchildren. When all of these combinations are considered, we see how groups must be kept small if the total number of potential relationships is to be kept down. The addition of an in-law to a household of mother, father, and three children means the addition of 211 new potential relationships.[24]

It is not surprising, therefore, that families with four or more children had the lowest mean score on a family solidarity scale, whereas families with one child had the highest score.[25]

The primary group has great integrating potentialities. One of the first sociologists to note the special function of small groups in society was Charles Horton Cooley. He directed attention especially to what he called *primary groups,* groups characterized by intimate relationships between members. Such relationships are usually, but not always, face to face. A close relationship can be carried on by correspondence; it was through a liking for each other's published verse that Robert Browning and Elizabeth Barrett developed their romantic interest in each other. Since our concern here is with relationships rather than with group membership *per se,* it is more accurate to speak of primary relations rather than primary groups. Primary relations can be provided by a variety of groups and not just by those which Cooley identified as the principal primary groups: the family, the neighborhood, and the play group. And, on the contrary, in some neighborhoods — and even in some families and play groups — relationships between the participants may not be personal and intimate. Cooley called the above-mentioned groups primary, because they are first both in time and importance. They are the groups of infancy and early childhood which usually play a commanding role in the development of personality.[26]

Social relations which are not primary but which are casual or formal are called *secondary relations.* Actually there are not just two polar types, namely, primary and secondary group relations, but various degrees of intimacy ranging from, say, that of very close friends to casual acquaintances. The point is that close friends are highly identified sympathetically with each other and are therefore greatly influenced by the relationship. A further qualification is that in a particular relationship, A may be more closely identified (more intimate) with B than B is with A.

Secondary-group relations are less time-

[23] The total number of intragroup personal relationships is expressed by the formula:

$$\text{P.R.} = \frac{(3^n - 2^{n+1}) + 1}{2},$$

where n is the number of individuals.

[24] William M. Kephart, "A Quantitative Analysis of Intragroup Relationships," *American Journal of Sociology,* 55: 544–549, May 1950.

[25] Luther T. Jansen, "Measuring Family Solidarity," *American Sociological Review,* 17: 732, December 1952.

[26] C. H. Cooley, *Social Organization* (New York: Charles Scribner's Sons, 1909, 1929), p. 27.

consuming and less demanding than primary relations, and we can therefore support or sustain more of them. Another way to express this is to say that the number of friends anyone can have is much smaller than the number of his possible acquaintances. Sociologists explain this by saying that a primary relationship is a relationship involving the whole personality, whereas a secondary relationship is segmental, involving only a small fraction of the self. It is probably more accurate to speak of the primary-group relationship as involving *more* of the self than does the secondary relationship.

Table 2 shows the approximate number of members in a sample of 895 gangs. Nearly two-thirds consist of 20 or fewer members. Gangs emphasize intimacy of contact and therefore tend to be small.

Table 2 · Approximate Numbers of Members in 895 Gangs*

Number of Members	Number of Gangs	Percentage of Total
From 3 to 5 (inclusive)	37	4.1
From 6 to 10	198	22.1
From 11 to 15	191	21.5
From 16 to 20	149	16.7
From 21 to 25	79	8.8
From 26 to 30	46	5.1
From 31 to 40	55	6.1
From 41 to 50	51	5.7
From 51 to 75	26	2.9
From 76 to 100	25	2.8
From 101 to 200	25	2.8
From 201 to 500	11	1.2
From 501 to 2,000	2	.2
Total Gangs	895	100.0

*Frederic M. Thrasher, *The Gang* (Chicago: The University of Chicago Press, 1927). Copyright, 1927, by the University of Chicago.

Secondary relations are relatively more common in complex modern society. Secondary relations are not of much importance in tribal society or in other small groups of families but are highly important in modern civil society with its very large numbers, like the United States today. Of the three component parts of group integration (division of labor, consensus, and morale), the first is the one on which complex mass societies must mainly depend for integration. Or more precisely, division of labor is relatively more important as an integrating force in modern society than in simple societies like those of most nonliterate people. As the group gets bigger, consensus is less perfect and more difficult to achieve; and as for morale, it is also more difficult to feel sentimental toward strangers. On the contrary, elaborate economic enterprises may require large numbers of workers and a complicated division of labor.

Primary relations underlie formal social systems and help to achieve their goals. Modern society is built in large part on impersonal social relations; but if all of the group interaction were impersonal, the society would be weakly integrated indeed. As it is, workers often complain about the monotony of modern factory production. Minute division of labor makes rare the experience of creative workmanship which comes when one makes the whole product. Management is far away, and ownership still further away. Yet there is considerable evidence that human beings need to feel that they belong. They want to be assured that someone cares and that they are not alone. This is the kind of assurance or security that primary relations provide. In all large-scale formal organization we therefore find a tendency for informal, personal relations to be established. In factories it will be small groups of employees who work together on a particular operation, or who fraternize during lunch time. The Army, a vast, impersonal organization with strict discipline, monotonous routine, and distasteful chores, recognizes the need to balance somewhat the complex secondary organization with primary relations, in the interests of

morale, and encourages, as a matter of policy, the "buddy" relationship. Buddies train, play, fight together. They look after each other. A buddy is someone who cares, who will not desert you in combat or when the going gets rough.

From the standpoint of the larger, formal organization, the principal function of the informal organization is to help achieve the objectives of the system.[27] In the case of the army, it is to make an effective fighting force. During World War II, the question was asked of a representative sample of soldiers: "What are the factors that keep you going?" The next to the most important reason given was: "I don't want to let the other fellow down." This answer was surpassed only by prayer when the going got rough and by "the desire to get the job over with."[28] Replacements in infantry divisions were more inclined to resort to prayer in time of danger than infantrymen who went overseas with their units. The primary relationship is thus a source of strength and, in time of trouble, it can be a partial substitute for religion.

While primary relations are satisfying, they are also demanding, and limiting. You cannot ignore your friends with impunity. If near by, they expect to see you frequently and to share certain activities with you. If they get into difficulty, they expect you to be helpful. If they disapprove of your conduct, you may curb it somewhat, since you do not want to offend them. When you associate with strangers or mere acquaintances, you are in large measure freed of such demands and expectations. You are let alone and left to do as you please, because nobody knows or cares. If you do not wish to be alone, you will be lonely, even utterly lonely, as so many people are in the big, impersonal cities.[29] Here, then, is the paradox. Primary relations are integrating but restrictive. Secondary relations are liberating but non-integrating. It is interesting to consider different types of communities from the standpoint of the different degrees of integration and freedom they provide.

[27] Edward A. Shils, "Primary Groups in the American Army," in R. K. Merton and P. F. Lazarsfeld (eds.), *Continuities in Social Research* (Glencoe, Ill.: The Free Press, 1950).

[28] S. A. Stouffer *et al.*, *The American Soldier*, Vol. II (Princeton, N.J.: Princeton University Press, 1949), pp. 108–109, 174.

Homogeneity

Size of group, we have seen, is related to group solidarity directly in terms of the volume of interaction and indirectly via the chances of consensus. It is easier to get agreement in a small group than in a big one. These observations introduce the phenomenon of homogeneity as a factor in group integration.

A small group is more likely to be homogeneous than a large group; thus small tribal societies are in general more homogeneous than large modern states. But a small group can be more heterogeneous than a large group. Cyprus is culturally more heterogeneous than Sweden.

Homogeneity refers to the likeness of the parts of a whole, while heterogeneity refers to differences among the parts. The Columbia Committee on Racial Equality, mentioned earlier, was a homogeneous group, ideologically. All the members belonged to the Fellowship of Reconciliation, an organization devoted to social reform by nonviolent means. The homogeneity of the group is said to have been one of the important reasons for the group's cohesiveness. They were in agreement on objectives and methods, and their consensus helped to integrate them.

How homogeneity is related to integration can be seen in connection with divorce rates. A low divorce rate, if it is coupled

[29] David Riesman, *The Lonely Crowd* (New Haven, Conn.: Yale University Press, 1950).

with low rates of marital separations, is an index of a high degree of family integration; and a high divorce rate — since divorce implies marital dissolution — is evidence of poor family integration. Sweden has a very much lower divorce rate than the United States, 14.8 divorces per 100 marriages in 1950 compared with 23.1.[30] The reasons for the difference are many; but prominent among them is the greater cultural homogeneity of the Swedes, and of the Scandinavians generally. Among 1,000 Scandinavians there are on the average 2 Lapps, 1 Jew, 1 German, and 3 Catholics; in the United States the corresponding figures would be 33 Jews and 190 Catholics. Sweden has one set of divorce laws for all Swedes, whereas the United States has a separate and different set for each state and the District of Columbia. The divorce rate is lower in Sweden despite the fact that divorces are easier to get than in the United States. The standard of living is high in Sweden, although not quite so high as in the United States, a factor which should favor the United States so far as divorce rate is concerned, since income level is positively correlated with family stability. Divorces are associated with cities, and the United States is more highly urbanized; but the difference is not great and is insufficient to account for the great differences in the divorce rate. So the differences in cultural homogeneity appear to be mainly responsible for the differences in family integration. When persons with highly similar traditions marry, they are more likely to stay married than are persons whose traditions are dissimilar.

Clash of interests is a basic obstacle to group integration. Even more important, the unity of a group is enhanced by common or supplementary interests and weakened by divergent and conflicting interests. The United States experienced a Civil War which nearly destroyed the Union because of the clash of interests of the urban industrial North and the rural agricultural South, focusing on the use of slave labor. If a society is culturally homogeneous, such divergencies of interest are less likely to occur than if the group is heterogeneous.

Heterogeneity, which fosters conflict, is linked to change, especially rapid change. A society becomes heterogeneous because of the infusion of new cultural elements via migration or diffusion, or because the different parts of the culture change unevenly. A stable society is more likely to be homogeneous.

Integration is of special significance in international relations and in the building of states, though sociologists have done less research in this field than in the fields of the family and the community. The success of empires depends upon integration. The British and Roman Empires broke up for lack of it and because of the growth of integration in the different countries that made up the empires. The British have been using the principles of integration to hold together, in a great Commonwealth, countries that were formerly in the Empire. Now all the members of the Commonwealth are working together to strengthen it by further integration.

Also throughout history the stability of states, as in the case of France, has depended upon integration. Civil wars occur in states, as shown in recent Spain, only when integration is weak. However, wars between states may increase integration within a warring country, as was true in Germany under Bismarck, provided the war has not been too crippling.

An interesting question for the Trust Territories, set up by the Security Council of the United Nations, looking toward self-government in a democratic ethos, and for newly

[30] Kaare Svalastoga, "The Family in Scandinavia," *Marriage and Family Living*, 16: 379, November 1954; and W. F. Ogburn and M. F. Nimkoff, *Technology and the Changing Family* (Boston: Houghton Mifflin Company, 1955), p. 217.

formed democratic states, is whether by attaining self-government they may not lose some efficiency in government based upon integration. Somewhat the same problem concerns power and democracy. Much of the world wants democracy, that is, government by the people; this is especially true in those countries where a degree of integration has been attained through power exercised by a social class or by an alien government. In such cases, democracy does not encourage integration, at least for a time, as in the case of Indonesia, but rather allows the centrifugal force of localism to operate in the different parts.

In any attempt to form a world government, the obstacles to the essential integration will be great indeed.

The United States is a nation of many different ethnic and religious groups with different value systems. These differences are reflected in our cities as well as in other types of community. Robert Angell, interested in the factors influencing integration, undertook a study of cities in the United States with a population over 100,000.[31] He constructed a welfare-effort index based on per capita expenditures raised from local sources. He used this measure as an index of community integration, on the assumption that the per capita expenditure for social services, with money derived from the local community, is a good measure of group morale and integration. Adjustments were made for the income of the community. On the negative side, a crime index was developed, on the theory that criminal acts lessen the integration of a community. Limitations of the method include the difficulty of obtaining comparable economic data and crime statistics for the cities studied; differences in community needs reflected in social services; and the use of so few measures for so complex a phenomenon as integration. Angell proceeded to correlate his index of community integration with a series of background factors, all but two of which produced nonsignificant correlations. The first of the two exceptions was cultural and economic heterogeneity, which correlated −.59 with integration, accounting thereby for 35 per cent of the variation in integration of the cities studied. The second significant factor, residential mobility, correlated −.49 with integration, accounting for 25 per cent of the variation. Heterogeneity and mobility combined gave a multiple correlation of −.79 with integration, accounting for 63 per cent of the variation. Angell therefore concludes that homogeneity and stability are the key factors in community integration.

[31] Robert Cooley Angell, *The Moral Integration of American Cities* (Supplement to the July 1951 issue of the *American Journal of Sociology*, Vol. 57).

Physical Mobility

We wish to consider certain aspects of cultural homogeneity as it relates to group integration, but first it is necessary to discuss briefly the factor of physical or residential mobility which Angell isolated. It is not difficult to see how mobility works against integration, for integration implies remaining in the group and wishing to remain, whereas mobility is an act which separates the individual or individuals from a group with which they have been affiliated. Since they are only recently arrived in the new setting, they are only incompletely identified with it. If the move is from one cultural area to another, there is present the problem of adjusting to new values. If the move is to the same kind of cultural area, there is still the problem of making new acquaintances and friends. So migration leads in any case to "de-grouping," at least temporarily, the individuals involved; and the experience is often a difficult one, especially for the children.

In analyzing the effects of migration, it

is helpful to distinguish two types: mobility of a whole group and mobility of a single member of a group. When, as with some nonliterate groups, the whole band moves from one site to another, following the game, there is probably little if any loss in group integration. When the members of a family move as a unit from one community to another, or one neighborhood to another, the problem is one of integration into the new residential area. There are data which show that juvenile delinquency, an index of low community integration, is strongly associated with physical mobility. Or, stated the other way, a low delinquency rate may be expected for a stable community "even though it were characterized by poverty, bad housing, and overcrowding."[32] An evidence of social stability is home ownership. Another relevant point is that Negroes contribute a disproportionate share of juvenile delinquency, mainly in those urban environments to which they are recent migrants or which are in transition.

The situation is often different when the migrant is a single member of a family, usually the breadwinner engaged in a mobile occupation. There is considerable evidence that the stability of the family life of such persons is in general affected adversely. Thus higher than average divorce rates are shown by traveling salesmen and by members of the armed forces.[33] The explanation is that, on the one hand, the familial ties are broken or strained by absence, and on the other hand, there is greater temptation to unconventional behavior in a new setting where controls are not so binding on the stranger.

It becomes obvious from the foregoing paragraphs, then, that physical mobility — of whatever type — is likely to pose problems for the integration of the group.

[32] Bernard Lander, *Towards an Understanding of Juvenile Delinquency* (New York: Columbia University Press, 1954).

[33] M. F. Nimkoff, "Occupational Factors and Marriage," *American Journal of Sociology*, 49: 248–254, November 1943.

PROCESSES OF INTEGRATION

Integration via Assimilation

The relationship between physical mobility and group integration may be viewed as an aspect of the problem of the relationship between homogeneity and integration. Mobility introduces a stranger into the group, and the problem is how to assimilate him without jeopardy to the group. In the new state of Israel, for example, representatives from about sixty different ethnic groups have been brought into the country since 1948. They speak different languages and have widely divergent customs. They are all Jews, but even in their religion they have considerable differences. For instance, the definition of what is Kosher food is different for different groups, and Jews with one conception feel uncomfortable about eating at the homes of those with a different belief. Israel, a small state with a population (1955) of less than two million, needs migrants to utilize her resources and to provide more adequate defense. How absorb these aliens without disrupting the group? The problem is complex, but the aim is to create a culturally homogeneous state. To this end, for instance, Hebrew has been made the official language and is taught to all the school children, as well as to many adults. Converting nomenclature in various fields to Hebrew has been a herculean task. Thus a dictionary of military terms had to be prepared. For this and other purposes, an Institute of Hebrew Studies was established.

The process whereby individuals or groups once dissimilar become similar, that is, become identified in their interests and outlook, is termed *assimilation*. It is "a process of interpenetration and fusion in which

persons and groups acquire the memories, sentiments, and attitudes of other persons or groups, and by sharing their experience and history, are incorporated with them in a cultural life." [34] The term was first applied to immigrants, probably because there was considerable interest in the problem of immigration at the time. This interest has since changed, with a change in immigration policy; and the use of the concept "assimilation" in research has diminished. It is a general concept, however, and its uses need not be confined to the acculturation of immigrants. When, for instance, foster children are introduced into the new homes of their foster parents, the process of adjustment or integration is one of assimilation. Or, to take another example, husbands and wives, starting marriage with dissimilar backgrounds, often develop a considerable unity of interest and purpose.

Assimilation is a two-way process. Close contact of persons of dissimilar cultures always results in mutual interpenetration and fusion of culture traits, although the borrowing may not be so pronounced in one direction as the other.[35] The assimilation of African Negroes into the culture of America has proceeded to the point where Negroes generally evince no interest in Africa as a homeland, and possess culture traits which are almost altogether American in nature. While the Negro was being assimilated, however, America was adding such Negro contributions as jazz music and spirituals to its cultural store. Likewise, as Linton [36] points out, the assimilation of Italians has given us, among other things, a wider interest in grand opera and spaghetti dinners.

Partial assimilation and integration. Assimilation, like integration, is a matter of degree. Ethnic groups not only contribute to the host culture, but they retain many of their own ways, so that the result, as in the United States, is cultural pluralism, a mosaic of separate groups. It has been shown that the use of the "assimilation cycle" as a frame of reference in studying such a group as the Norwegians in prairie society is unrealistic. Never having been made to feel inferior, the Norwegians are integrated in American society, but the integration is not complete; and they retain much of their Old World heritage.[37] Cultural pluralism may thus often represent voluntary, incomplete assimilation. Where a minority group is rejected by the majority group, as the Irish were in Boston prior to 1865,[38] they have even more incentive to retain and develop their own institutions, such as schools and newspapers. The conflict of cultures in a community results, then, in some integration but also in the emergence of patterns which are not necessarily transitional to a common culture but may form a stable part of the culture.[39]

A comprehensive index,[40] designed to measure the degree to which persons of foreign background have internalized certain aspects of American culture and the degree to which they have retained aspects of their own culture, has been devised by Campisi. The instrument appears to be valid and reliable, and, although based on Italian, French Canadian, and Portuguese groups in Massachusetts and Rhode Island, may per-

[34] R. E. Park and E. W. Burgess, *Introduction to the Science of Sociology* (2d ed.; Chicago: The University of Chicago Press, 1924), p. 735.

[35] Alain Locke and Bernhard J. Stern, *When Peoples Meet* (New York: Progressive Education Association, 1942).

[36] Ralph Linton, *The Study of Man* (New York: Appleton-Century-Crofts, Inc., 1936), p. 335.

[37] John Useem and Ruth Hill Useem, "Minority-Group Pattern in Prairie Society," *American Journal of Sociology*, 50: 377–385, March 1945.

[38] Oscar Handlin, *Boston's Immigrants 1790–1865: A Study in Acculturation* (Cambridge, Mass.: Harvard University Press, 1941).

[39] Ralph H. Danhof, "The Accommodation and Integration of Conflicting Cultures," *American Journal of Sociology*, 49: 14–23, July 1943.

[40] Paul J. Campisi, *A Scale for the Measurement of Acculturation* (Doctoral dissertation, University of Chicago Libraries, August 1947).



Zionist House

Woman from Morocco

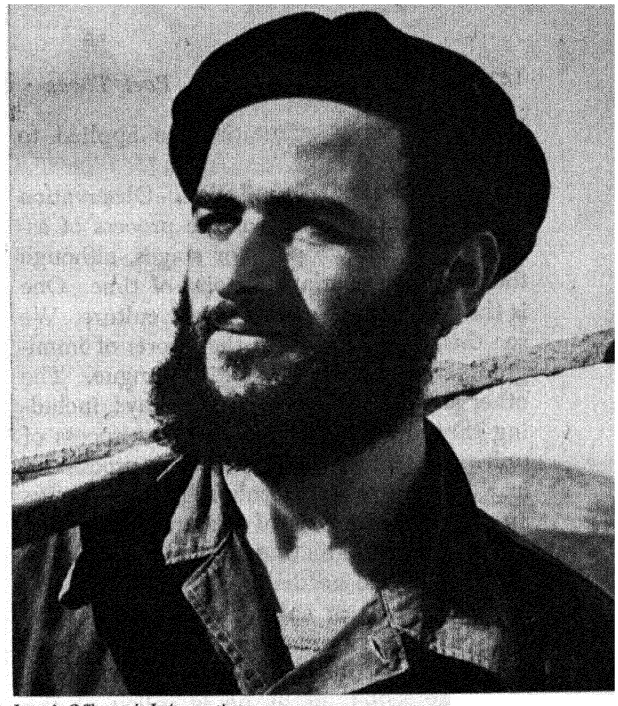
54 Integration and Assimilation

Perhaps no other state ever had an assimilation problem of such magnitude, over so short a period of time, as Israel which since its founding as a state in 1948 has admitted many hundreds of thousands of immigrants from more than sixty different ethnic groups, with different languages, customs, and norms. Hebrew, which is not spoken by most of the recent immigrants, has been made the official language. To use Hebrew in the army, more than 8,000 Hebrew terms had to be devised. So intense has been the effort to assimilate the immigrants that Israel has been called not a melting pot but a pressure cooker. Shown here are only four of the many immigrant ethnic groups.

A Druse Patriarch

Zionist House



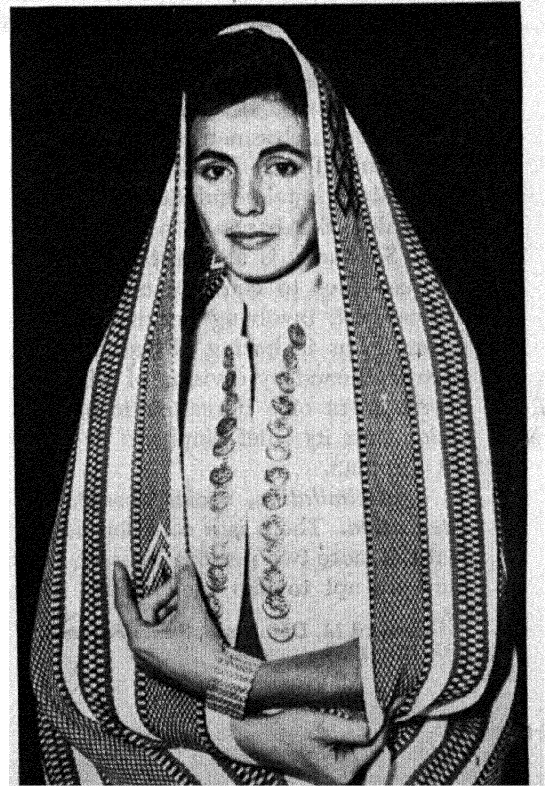


Israel Office of Information

A French Immigrant

Woman from Yemen

Zionist House



haps with some adaptation be applied to other ethnic groups.

Phases of assimilation. Observation of immigrants shows that the process of assimilation has two parts or stages, although the two may overlap in point of time. One is the suppression of the parent culture. We see this, for example, in the efforts of immigrants not to use the native tongue. The other is the acquisition of new ways, including the new language. One is a process of unlearning the old; the other a process of learning the new. Dornbusch has given us an excellent analysis of "the military academy as an assimilating institution."[41] The function of the academy is to make officers out of civilians or enlisted men. This is accomplished by imparting technical knowledge and instilling appropriate attitudes. The new cadet, or as he is called at the Coast Guard Academy, the *swab,* must suppress pre-existing statuses. Discussions of wealth and family are taboo, and no money may be received from home. The objective is equality of status. Concurrently the swab learns the new rules and how to adjust to conflicts between rules. He must learn, for example, how to behave when he is asked by an upperclassman to buy him some candy, an infraction of the rules. The swab learns the formal regulations and the informal rules, the bases of normative integration. Solidarity is also furthered by sucessful responses to common experiences of a critical sort, involving deprivation, pain, or suffering, as in hazing. Finally, integration is strengthened by division of labor and the development of a bureaucratic organization which puts its chief emphasis on the office, not the man.

Assimilation, social acceptance, and integration. There is a common assumption that the more two persons interact, the more they are apt to like each other. All other things being equal, this is true.[42] The more they interact, the more alike they tend to become. And the more alike they become, we say, the better they will like each other. There is a companion idea that the more we know about others, the better we like them. Not a few social programs are predicted on these convictions, as for example, the international exchange of students and university professors in the interests of world peace. But these are only half-truths, as will be shown by the following discussion.

Assimilation, when it proceeds satisfactorily, means that a person or group has acquired the values of another group. This represents normative integration. There is similarity of standards, tastes, interests. But it will be recalled that integration has also a social psychological aspect. To be fully integrated into the society, the individual or group which was formerly alien must be liked and accepted by the members of the society. And it is a matter of common observation that such acceptance is not always forthcoming. Indeed, sometimes the resistance to acceptance increases as a group becomes more completely assimilated. This has been true in the United States for a number of racial groups. The Negroes today are more fully assimilated than they were in slave times, and they are more fully integrated into American society for this reason and also because they have achieved a certain measure of organic integration in occupation, education, recreation, religion, etc. But there has been a lag in social psychological integration, or social acceptance. Can we say that Negroes in the United States are generally better liked by white people in the middle of the twentieth century than they were, say, a century ago, before emancipation? The Negroes today are more fully assimilated, yet as a group they are now less well adjusted to the white man's world than they were in the earlier

[41] Sanford M. Dornbusch, *Social Forces,* 33: 316–321, May 1955.

[42] George Homans, *op. cit.*

period of slavery. It has been shown by means of objective tests that the better educated Negroes are more militant in their objection to caste discrimination than are those with less training.[43] The more thoroughly assimilated Negroes become, the more they realize the limitations and discriminations under which they must live and the more resentful they become. The more assimilated the Negro, the more nearly he approaches the white man in competitive skill; hence the greater becomes the white man's resentment against him.

Where the alien individuals differ from the majority group in culture only, assimilation may easily lead to rather complete acceptance and social integration. Members of the second and third generations of immigrants from northern Europe are readily absorbed. Even members of the first generation with unusual talent of some sort and an ability to take on the American patterns of life may win complete acceptance, as is witnessed by the career of Edward Bok, the Dutch immigrant boy who rose to social and financial prominence.[44] But when a racial barrier, or what is thought to be a racial barrier, also exists between the two groups, the situation is radically different. An alien culture can be set aside, but not an alien skin.

Effects of large numbers on the integration of a minority group. Earlier we considered the relationship between size of group and group integration. Now we examine another aspect of the problem of group size, this time the size of the alien group seeking admission and the relationship of size to acceptance. The principle may be stated thus: the larger the proportion of newcomers, the greater the resistance of the established group to their integration.[45] This hypothesis was tested experimentally by Moreno.[46] At the Hudson School for Girls, a correctional institution in New York State, six or eight girls lived together in a cottage. It was found that the introduction of one Negro girl into a cottage caused little or no resentment, but the hostility increased if others of the same race were added, with the increase in resentment disproportionate to the increase in numbers. Similarly, opposition among whites to the integration of Negroes in the school system of the South varies with the size of the Negro population and is greatest where the percentage of Negroes is greatest.[47]

Measurements of integration. We have referred in previous paragraphs to various methods of measurement for different types of integration. We mentioned the standard sociometric test for recording preferences for associates for various purposes. We considered Angell's tests of the "moral integration" of cities. In the field of the family, there are tests for measuring the degree of consensus between husband and wife, and between parents and children. There are also devices for determining the state of morale between spouses, which we call marital happiness.

A general system of recording and measuring group interaction is the Bales[48] method of "interaction process analysis." This system shows, first, who initiates the act and to whom it is directed. It also classifies acts into twelve categories, as follows:

1. *Shows solidarity,* raises other's status, gives help, reward.

[43] Charles S. Johnson, "Racial Attitudes of College Students," *Publications of the American Sociological Society,* May 1934, pp. 24 ff.

[44] Edward Bok, *The Americanization of Edward Bok* (New York: Charles Scribner's Sons, 1920).

[45] Lazarsfeld and Merton, *op. cit.*

[46] J. L. Moreno, *op. cit.*

[47] W. F. Ogburn and Charles Grigg, "Factors Related to the Virginia Vote on Segregation," *Social Forces,* 34: 301–308, May 1956.

[48] Robert F. Bales, *Interaction Process Analysis* (Reading, Mass.: Addison-Wesley Publishing Co., Inc., 1950).

2. *Shows tension release,* jokes, laughs, shows satisfaction.
3. *Agrees,* shows passive acceptance, understands, concurs, complies.
4. *Gives suggestion,* direction, implying autonomy for other.
5. *Gives opinion,* evaluation, analysis, expresses feeling, wish.
6. *Gives orientation,* information, repeats, clarifies, confirms.
7. *Asks for orientation,* information, repetition, confirmation.
8. *Asks for opinion,* evaluation, analysis, expression of feeling.
9. *Asks for suggestion,* direction, possible ways of action.
10. *Disagrees,* shows passive rejection, formality, withholds help.
11. *Shows tension,* asks for help, withdraws out of field.
12. *Shows antagonism,* deflates other's status, defends or asserts self.

These categories show the relevance of the act either to the solution of a problem confronting the group or to the solidarity of the group. The first three acts listed above are definitely positive or acts of support and are therefore integrative acts, whereas the last three are negative acts.

In addition there are scales for measuring the degree of acceptance of one group by another. If there is no conflict between two individuals or groups, they will willingly consent to share certain experiences. The more kindly disposed they are toward each other, the more intimate will be the experiences they are willing to share. If, on the other hand, there is great hatred between them, they prefer to avoid each other altogether. Consequently, it is possible to measure the degree of social acceptance or *social distance,* as is shown in Table 3.

Cooperation, Conflict, and Integration

These measures of liking and disliking, and acceptance and rejection, call to mind Samuel Butler's observation that our experiences with others partake of the nature of either a string or a knife; they bind us closer together or they cut us apart. This is only a picturesque way of saying that in all group life both unifying and divisive forces are operative. People marry and are divorced, work and strike, form religious brotherhoods and engage in sectarian strife. Indeed, the social organization of a community at any given time represents the balance struck between these centripetal and centrifugal forces.

It is these on-going tendencies in group life, these fundamental ways in which men interact, to which the name *social processes* is applied. When men work together for common goals, their behavior is called *cooperation.* When they strive against one another, their conduct is labeled *conflict.* Cooperation and conflict are the two basic processes of group life. We wish in this chapter to consider their relationship to group integration.

We have stated that these processes are operative in all group life, irrespective of the content of group behavior. Therefore cooperation and conflict, and the derivative processes we shall consider shortly, are tool concepts to be used throughout our analysis of social behavior. It should be noted, however, that these processes operate on three different levels: between groups, between individuals, and between the individual and a group. The principles which govern these processes are not the same for all three aspects. For example, the integration of the group is generally threatened more by conflicts within the group than by conflict between groups. And conflict may exist between groups, as in wars between modern states, without an expression of hostility on the part of all the members of one group toward the other. In World War I Madame Schumann-Heink, the great singer, living in the United States, had sons in both the German and the American armies.

Table 3 · Reactions of 1725 Americans (Native-Born) to 40 Different Groups (Percentages)*

Would admit ethnic groups listed below:	1 To close kinship by marriage	2 To my club as personal chums	3 To my street as neighbors	4 To employment in my occupation	5 To citizenship in my country	6 As visitors only to my country	7 Would exclude from my country
English	93.7	96.7	97.3	95.4	95.9	1.7	0.
Americans (native white)	90.1	92.4	92.6	92.4	90.5	1.2	0.
Canadians	86.9	93.4	96.1	95.6	96.1	1.7	.3
Scotch	78.1	89.1	91.3	92.8	93.3	1.7	0.
Scotch-Irish	72.6	81.7	88.	89.4	92.	16.7	.4
Irish	70.	83.4	86.1	89.8	91.4	4.	.7
French	67.8	85.4	88.1	90.4	92.7	3.8	.8
Welsh	60.8	72.3	80.	81.4	86.	5.4	.3
Germans	54.1	67.	78.7	82.6	87.2	6.7	3.1
French-Canadians	49.7	66.4	76.4	79.3	87.	4.4	.8
Swedes	45.3	62.1	75.6	78.	86.3	5.4	1.
Dutch	44.2	54.7	73.2	76.7	86.1	2.4	.3
Norwegians	41.	56.	65.1	72.	80.3	8.	.3
Danes	35.	52.2	65.5	71.4	80.1	4.5	.9
Spaniards	27.6	49.8	55.1	58.	81.6	8.4	2.
Finns	16.1	27.4	36.1	50.5	61.2	12.8	2.8
Russians	15.8	27.7	31.	45.3	56.1	22.1	8.
Italians	15.4	25.7	34.7	54.7	71.3	14.5	4.8
Portuguese	11.	22.	28.3	47.8	57.7	19.	3.3
Poles	11.	11.6	28.3	44.3	58.3	19.7	4.7
Hungarians	10.1	17.5	25.8	43.	70.7	20.3	7.
Roumanians	8.8	19.3	23.8	38.3	51.6	22.	4.6
Armenians	8.5	14.8	27.8	46.2	58.1	17.7	5.
Czecho-Slovaks	8.2	16.4	21.1	36.	47.4	26.	9.5
Indians	8.1	27.7	33.4	54.3	83.	7.7	1.6
Jews, German	7.8	2.1	25.5	39.8	53.5	25.3	13.8
Bulgarians	6.9	14.6	16.4	19.7	43.1	21.9	7.
Jews, Russian	6.1	18.	15.7	30.1	45.3	22.7	13.4
Greeks	5.9	17.7	18.	35.2	53.2	25.3	11.3
Syrians	4.3	13.8	18.	31.	41.1	21.4	9.
Serbo-Croatians	4.3	10.4	12.	10.3	30.4	18.6	8.
Mexicans	2.8	11.5	12.3	77.1	46.1	30.8	15.1
Japanese	2.3	12.1	13.	27.3	29.3	38.8	2.5
Filipinos	1.6	15.2	19.5	36.7	52.1	28.5	5.5
Negroes	1.4	9.1	11.8	38.7	57.3	17.6	12.7
Turks	1.4	10.	11.7	19.	25.3	41.8	23.4
Chinese	1.1	11.8	15.9	27.	27.3	45.2	22.4
Mulattoes	1.1	9.6	10.6	32.	47.4	22.7	16.8
Koreans	1.1	10.8	11.8	20.1	27.5	34.3	13.8
Hindus	1.1	6.8	13.	21.4	23.7	47.1	19.1

*Emory S. Bogardus, *Immigration and Race Attitudes* (Boston: D. C. Heath and Company, 1928), p. 25.

Competition. Competition is the fundamental form of social struggle and occurs when demand outruns supply. The basic terms of competition are "a population of insatiable wants and a world of stubborn and inadequate resources." [49] In our society, for example, there are generally more people who want jobs than there are jobs available; hence there is competition for available places. Among those who already have employment there is competition for better posts. There is competition not only for bread, but for luxuries, power, social position, mates, fame, and all the other things not available for the asking.

So long as attention is focused on the goals for which individuals are striving, the competition remains impersonal and therefore sub-social. When there is a shift in interest from the objects of competition to the competitors themselves, *rivalry* results. Rivalry is personalized competition. *A* wishes not only to win the prize but to beat *B*. Each knows that he can win the prize only by defeating the other. When personalized in this way the competition tends to become keener, and hostility between the competitors is easily engendered. As a consequence, antagonistic competition, or conflict, may develop. The ultimate object or "logical extreme" of all conflict is the elimination of the competitors.

In the interests of clarity, it has been necessary to define each process separately. But it is unrealistic to think that the several social processes are unrelated. In fact, the interrelationship is complex. Conflict itself may involve cooperation. There can be no conflict unless the competitors recognize one another as adversaries. In countries where dueling is the custom, an encounter occurs only when a challenge is made and accepted. The one who is challenged may ignore the invitation to fight if he feels the challenger is beneath him socially. The phenomenon of cooperation as a condition of conflict is recognized in the popular saying that it takes two to make a quarrel. Christianity takes cognizance of this fact when it recommends nonretaliation as a solution to the problem of hostility.

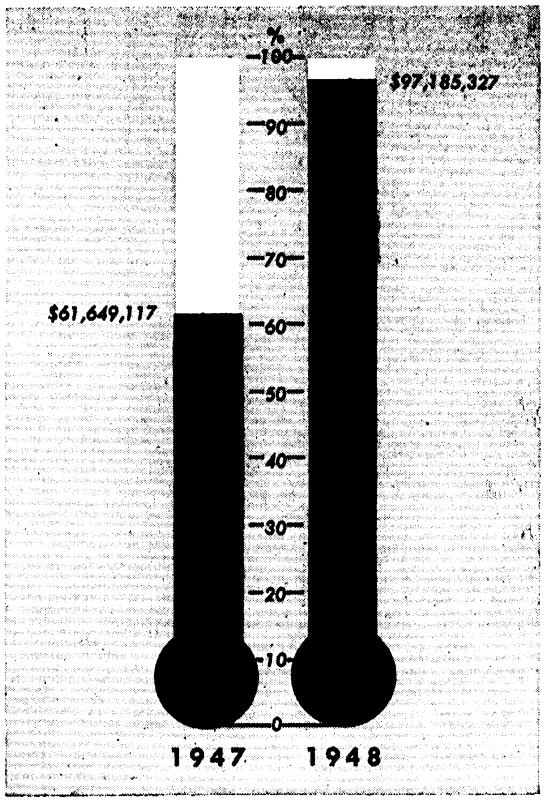
One of the more important generalizations in sociology has to do with the relation of out-group hostility to in-group solidarity. The generalization may be stated thus: intergroup conflict is a potent factor in promoting intragroup cooperation. Indeed, it is difficult to exaggerate the part that external struggle plays in consolidating a group internally. If it does not eliminate intragroup conflict, it often subdues it and makes it covert. Cooperation and patriotism among the citizens of a nation are seldom more perfect than when the enemy is at the gate. In wartime there are coalition cabinets of different parties; and a common trick of politicians who want to dodge a domestic defeat is to get up a war scare.

Intergroup conflict will increase intragroup morale and integration if there is anticipation of victory and confidence in the struggle. Without these factors, the conflict may be disorganizing.

Cooperation is integrating; intragroup conflict is disorganizing. Within a group, cooperation is an integrating factor and conflict is a disorganizing influence. This is a general statement which needs qualification in particular situations because of the complex interrelationships of the two processes and the varying conditions under which they operate. In one experiment [50] two classroom groups were created. One was told that all the members would get the same grade depending upon the quality of the col-

[49] Walton H. Hamilton, "Competition," *Encyclopedia of the Social Sciences,* IV (New York: The Macmillan Company, 1937), p. 143.

[50] Morton Deutsch, "The Effects of Cooperation and Competition Upon Group Processes," *Human Relations,* 2: 129–152, 199–231, 1949.



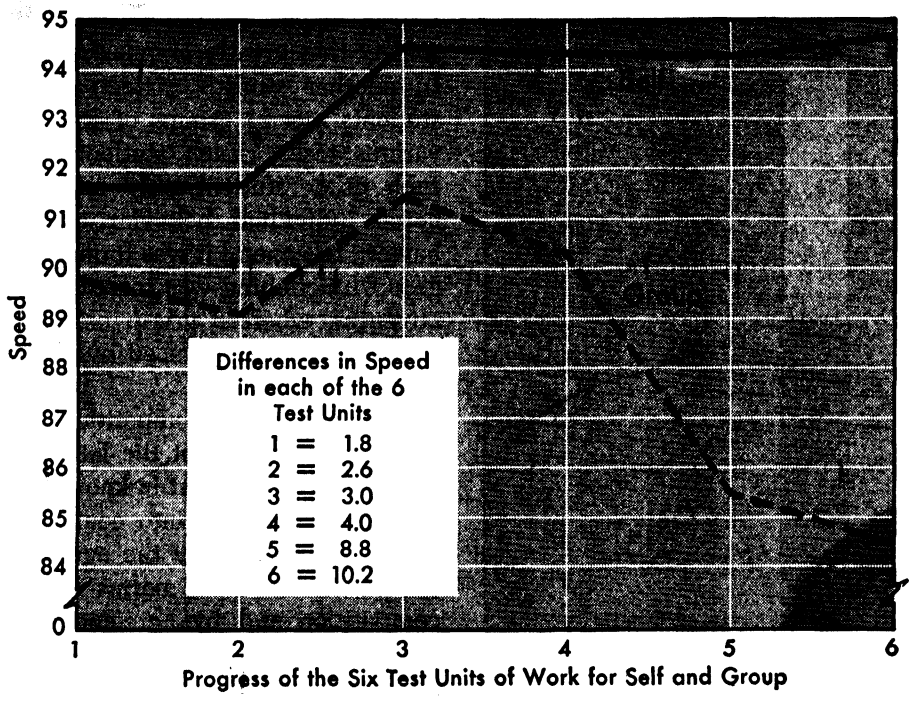
55 Contributions to Israel Before and During the War of 1948

Israel was attacked by the armies of six Arab nations on May 15, 1948, the day after the state of Israel was proclaimed. A truce became effective in early January, 1949. The figures represent the income of philanthropic organizations raising funds for Israel in the United States, and indicate that in the year of special crisis, 1948, the amount contributed was more than 50 per cent greater than in the previous year. Conflict between hostile groups tends to heal differences within the contending groups and to lead to greater group loyalty and effort, especially if there is hope of victory. (Data from the Zionist Archives and the Library of Palestine Foundation Fund.)

lective product. The other was told that they would be rewarded differentially, each in terms of his achievement. Tests showed that the cooperative groups were more highly integrated, more friendly, liked one another better. It may be noted that this was an experiment in the United States, a society that greatly emphasizes competition. In another study[51] sixteen male NROTC students met in groups of four to work on various tasks. Each student worked with each other student only once. Observers noted individual behavior and group behavior. In general it was found that effective group functioning was increased by cooperativeness, whereas group cohesiveness and friendliness were reduced by striving for individual prominence.

Both intragroup competition and conflict are disorganizing, but the latter is more so. Hence there is interest in knowing why competition often turns into conflict. Competition is maintained by the agreement of the competitors on the norms governing the competition and by agreement on the application or interpretation of the norms. Changes in either may bring conflict. Thus in industry, new demands by the workers or by management, leading to a change in the status quo, if unacceptable to the other party, may result in a strike or a lockout. Many conflicts are caused by disputes about the proper application of the existing rules, as in disputes over umpires' decisions in a baseball game. Finally, competition may give rise to conflict when competition is initiated between groups which formerly did not compete, especially if there is long-standing prejudice against the new competitors. Thus conflict between white and Negro residents has developed when Negroes compete with whites for the same housing. When Negroes live in segregated areas, there is no competition for living space with whites, of course, and no conflict with them. Competition in this instance gives rise to conflict when the group which has had the advantage begins to lose it.

[51] William Haythorn, "The Influence of Individual Members on the Characteristics of Small Groups," *Journal of Abnormal and Social Psychology*, 48: 276–284, 1953.



56 The Effect of Competition Upon Speed

When the children worked for themselves in competition with other members of the class, their speed was always greater than when they worked as members of the class with no idea of competing among themselves. The speed was much more sustained as new tests were added when they worked for themselves than it was when they worked for the honor of the group. Individual competition is a great spur to productivity, but often at the price of group solidarity. (From J. B. Maller, *Co-operation and Competition*, New York, Teachers College, Columbia University, 1929, p. 25.)

Accommodation

Since conflict disturbs the integration of the group, and social stability is favorable to social order, human societies make efforts to prevent conflict, to keep it within bounds when it occurs, and to terminate it.

Accommodation is the term used by the sociologist to describe the adjustment of hostile individuals or groups. Accommodation is adjustment to conflict, past, present, or incipient. In accommodation there is latent hostility, so that the adjustment may be only temporary, with conflict breaking out at a later time. Yet accommodation is not merely quiescent conflict. Accommodation refers rather to the actual working together of individuals or groups in spite of differences or latent hostility. This led Sumner to refer to accommodation as "antagonistic cooperation." Accommodation, like the other group processes, is a matter of degree.

The integration of conflicting individuals or groups depends on the outcome of the conflict, or on the forms of accommodation.

Victory usually leads to a relationship of superordination and subordination. Overt conflict comes to a close when one of the antagonists achieves a clear-cut victory over the other. The loser has to choose between submitting to the terms of peace imposed by the victor or continuing the con-

flict with the risk of extermination. If the one who is defeated is also annihilated, the social relationship obviously comes to a close. Conflict may lead to the elimination of one or both rivals, but as a rule some sort of adjustment is worked out short of carrying conflict to its "logical extreme." In cases where one party to a conflict is victorious over the other, the latter usually accepts defeat and a position of inferiority.

Compromise as coordinate accommodation. The superordination–subordination type of adjustment usually results when the contestants are unevenly matched, or when the issue is brought to a definite head through the victory of one of the parties. When the combatants are of about equal strength, on the other hand, neither may be able to prevail over the other. In order to avoid fruitless struggle, the contestants may agree to a compromise wherein each party to the dispute makes some concessions. The "all-or-nothing" attitude gives way to a willingness to yield certain points in order to gain others. "A compromise is by its nature a crazy quilt in which everyone can identify his patch; he can find consolation for his disappointment by reflecting that everyone else is disappointed too." [52] The Compromise of 1850 is an historical example. The South wished to extend the system of slavery throughout the new territory, while the North was determined to exclude slavery altogether from new territory. To avoid war, it was agreed to admit slavery to certain states and exclude it from others. Thus compromise may be resorted to when the contestants wish to avoid open conflict, in order to "save the union."

Politicians are generally realists who believe that half a loaf is better than none. Compromise has therefore been called the politician's art. Idealists find compromise less palatable, and martyrs and die-hards scorn it. Rebellious people are particularly loath to compromise since they have a compulsion to keep on fighting. Some matters, like religious ideologies, are not subject to compromise.

Toleration may occur where compromise is not feasible. Where, as in religion, compromise is not feasible and the conflicting groups do not resort to open hostility, only one adjustment is possible, namely, toleration. In toleration no concession is made by any of the groups, and there is no change in basic policy. Each group, however, must bear with the others. Though each religious group believes its faith is the only correct faith and proselytes for new members, it must suffer the other groups and accord them the same rights. In the United States religious toleration came only after years of religious strife. The difficulty of maintaining this fine balance is shown by the recent church history of Russia, Spain, and Argentina.

The cultural control of conflict. Cultures differ in the kinds of accommodation they prefer. Some insist on a clear-cut victory and frown on compromise and conciliation, while other cultures extol conciliation. Among the Kwakiutl, for instance, compromise is regarded as a sign of weakness. If one man murders another, he may avoid retribution on the part of the murdered man's family by paying them an indemnity; but this settlement is regarded as a disgrace which hounds the murderer's family for generations.

On the contrary, the Zuni, favoring peace and moderation as they do, are inclined to compromise; and the same seems to be true of the Chinese. In China, it often happened that should two persons start a quarrel on the street, they might soon be surrounded by interested spectators. The whole group would then repair to a teahouse, where over teacups each principal would present his side of the case, while the audience would

[52] H. D. Lasswell, "Social Conflict," *Encyclopedia of the Social Sciences,* IV: 195.

act as jury. If the verdict went against one of the contestants, he paid for the tea party and the affair became a closed matter.[53]

In the United States compromise, conciliation, and arbitration are favored, although the usual resort is to more formal means of settlement, such as courts, tribunals, and commissions. So many different interests and points of view are represented in our heterogeneous, complex society that compromise and concessions are required if social life is not to be too greatly disturbed.

The spirit of compromise in our culture is evidenced strikingly in legislative bodies,[54] which may be said to represent the differing and clashing interests of the community. So well established is the principle of compromise that a standard technique for the resolution of conflicts has been evolved: the conference committee. Matters upon which the two houses cannot agree are referred to a committee, consisting of members of both houses, who work out a compromise bill.

How effective are the various methods of accommodation? Our knowledge in this important field is limited, but researches[55] indicate that information and education, legislation and law enforcement, and adequate social organization may be effective in reducing intergroup conflict. Propaganda which emphasizes common values is generally more effective in reducing conflict than that which stresses intergroup differences. Except in acute crisis situations, problems of group conflict are usually more readily resolved by indirection than by frontal assault. The best results are also obtained if the individuals are not attacked, are allowed to express their hostility, are permitted to discover the facts for themselves, are approached as groups, and are encouraged to identify themselves favorably with someone in the out-group, so that the issue is personalized. How adequate social organization can reduce intergroup tensions is shown by the experience in Detroit where a factor in strained race relations — the crowding of commuters into overloaded streetcars and buses — was ameliorated by having the passengers queue up at a loading platform.

Accommodation is a process of providing for the co-existence of disparate and conflicting groups in society in the interests of social order. Certain traditions and practices may, however, be obstacles to peace or accommodation. There was a time in Western society when family feuds were permitted and sanctioned. The Montagues and the Capulets could keep on fighting it out with serious consequences not only for the two families but for the whole community of Verona. When courts came in, feuding came to be viewed as a cultural lag, and the integration of the community was strengthened. Hence the question may be raised whether some of the methods of dealing with conflicts between groups which we now sanction may not also in the future be regarded as obstacles to more effective integration.

[53] Lin Yutang, *The Importance of Living* (New York: Reynal and Hitchcock, 1937), p. 44.

[54] T. V. Smith, *Legislative Way of Life* (Chicago: The University of Chicago Press, 1940).

[55] Robin M. Williams, *The Reduction of Intergroup Tensions* (New York: Social Science Research Council, Bulletin 57, 1947).

SUMMARY

In this chapter we have wanted to know why groups arise and why some of them endure. In general we say groups are formed because they serve certain basic needs; and they endure because these needs are continuing needs. In addition there are several processes that tie the members of a group together more or less securely. These processes are division of labor or cooperative labor, agreement or consensus on norms, and satisfaction with one's associates or group morale. A high degree of consensus integrates a group more than does a low

degree of consensus. Norms that stress cooperation result in more group solidarity than norms that emphasize competition, although the latter may be superior in other ways, as in promoting higher productivity. Among the values that maximize group solidarity, noteworthy is efficient social organization centering in discipline. Morale is heightened by success and by the feeling on the part of the group that it is the object of special recognition or status.

Integration is facilitated by cultural homogeneity and hampered by heterogeneity. Since homogeneity is easier to achieve in small groups than in large ones, size of group is indirectly related to group integration via the composition of the population. Smallness of the group also favors integration directly because of the more limited number of social relationships in small groups. Especially important as agencies of integration are the small, intimate groups called primary groups. Primary groups give us security and affection, whereas the more impersonal secondary groups of our modern mass society give us more freedom.

Physical or residential mobility, a common characteristic of our time, is a significant obstacle to group integration, since moving "de-groups" the movers, at least temporarily. Mobility introduces a stranger into the group and creates the problem of assimilation. The solution is to discard the old behavior patterns, insofar as they clash with those of the new hosts, and take on the new. A person or group may acquire the values of another group and be assimilated culturally and yet not be accepted by the majority group. The larger the number of aliens, the more difficult the problem of integration of the minority group.

Intragroup conflict weakens group solidarity, hence many groups try to minimize such conflict. Various techniques of accommodation such as conciliation, compromise, and arbitration have been developed to promote the co-existence of individuals or groups with conflicting interests.

QUESTIONS FOR DISCUSSION

1. What is meant by group integration as a unitary concept?
2. Are some value systems more highly integrating than others?
3. What is the sociometric approach? Its contribution and limitations?
4. What is the relationship between doing things together and liking people?
5. How does group morale affect efficiency?
6. What is the phenomenon of relative deprivation?
7. How does size of group affect group solidarity?
8. What are the functions of primary-group relations in complex modern society?
9. How are rates of juvenile delinquency related to physical mobility and group integration?
10. What is the effect of (a) prejudice and (b) large numbers on the integration of a minority group?
11. How are (a) out-group hostility and (b) intragroup cooperation and conflict related to in-group solidarity?
12. What methods of accommodation are most effective?

TOPICS FOR REPORTS

1. Obstacles to group integration.
2. Suicide rates and group integration.
3. The measurement of consensus.
4. Factors in group morale.
5. Reference groups and relative deprivation.
6. Primary-group relations in the armed forces.
7. The marginal man.
8. Measurements of integration.

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A method for breaking up social interaction into unit acts which can be observed and recorded separately. Notable for its influence on subsequent research but limited with respect to the types of interaction to which the method can be applied.

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WILLIAMS, ROBIN M., *The Reduction of Intergroup Tensions: A Survey on Problems of Ethnic, Racial, and Religious Group Relations.* New York: Social Science Research Council, Bulletin 57, 1947.

A comprehensive survey of the pertinent literature, with emphasis on principles and suggestions for further research.

WOLFF, KURT H. (ed.), *The Sociology of Georg Simmel.* Glencoe, Ill.: The Free Press, 1950.

Penetrating analyses of the forms of group life by an early master. Part Two: "Quantitative Aspects of the Group." Translated, edited, and with an introduction by Kurt H. Wolff.

7

Role and Status

The romance of Princess Margaret of Great Britain and Captain Peter Townsend posed a serious problem because, according to the norms of the English culture, they had incompatible statuses. She was a member of the royal family; he a commoner. He was a divorced man whose former wife still lived, and the Church of England bars remarriage of such persons. He was 40, she 25, but that presented no legal problem. Queen Elizabeth as "Defender of the Faith" and official head of the Established Church could scarcely consent to the marriage, whatever her sympathies may have been. Under the Royal Marriage Act, Princess Margaret, at the age of 25, might marry without the sovereign's consent, provided she gave the Privy Council a year's notice. To marry, she might be required to renounce her title, all rights of succession for herself and her heirs, her annual stipend of seventeen thousand dollars, and the right to be officially received at Buckingham Palace. A similar crisis in the royal family had occurred a generation before when her Uncle Edward, Prince of Wales, renounced the throne in order to marry Wallis Simpson, a commoner and a divorced woman.

These examples show that society is greatly concerned about rank and roles and the rules that govern them. Because they are important phenomena, we want to know what they are, how they arise, how they affect our lives, how they change, and how and why they vary in different cultures.

SOCIAL DIFFERENTIATION

Individuals and groups show differences which may be classified or scaled. We begin by observing that individuals and groups may differ in such attributes as sex and occupation, which permit of classification. Or the differences may be scalable, like differences in income or differences in age.

Individuals and groups with different attributes engaging in social interaction have different roles. Next we note that two or more individuals and groups which are heterogeneous with respect to sex, occupation, and other attributes, when interacting, have different functions to perform, such as getting food, bearing babies, and fighting. These different functions when prescribed by the culture in a specific type of social situation for a person who occupies a given position are called social *roles.*

The differentiation of roles is a socially effective device for getting things done. An organization ordinarily functions better if the jobs that need to be done are assigned to different members. Division of labor is usually more efficient than letting everyone do what he pleases, or assigning all the responsibility to one person, or having everybody do the same tasks. Once a person has a particular role, he is expected by the group to function in a particular way. So a role is a set of socially expected and approved behavior patterns, consisting of both duties and privileges, associated with a par-

ticular position in a group. The president of an organization is supposed to provide leadership for the group and to preside at meetings. The vice-president takes over when the president is absent or incapacitated. The secretary keeps the minutes. These are the duties. There may be privileges like remuneration, perquisites of the office, and so on. If there is a written constitution, these duties and rewards will be recorded in detail. But there is more to, let us say, the president's role than the performance of certain duties. There is a certain range of behavior appropriate to the office. Roles are socially effective if we can count on individuals behaving in the approved manner, for then we know what to expect and can adjust our own behavior accordingly.

Society is an organization of many groups carrying on many different kinds of activity, hence there are many social roles. A given individual has at least as many roles as he has group affiliations. He may have more if he plays more than one role in any group, as when, say, the offices of secretary and treasurer are combined. The number of roles is increased also by virtue of the fact that there are different types [1] which can be filled by the same person. All of us from time to time engage in role-taking, like actors who take the parts of others. Such behavior is particularly noticeable in young children, who imitate their elders in their play. Such role-taking is anticipatory; that is, it helps the individual to understand more fully the roles of others which at a later time may become his own roles. We tend to take the roles of others when we sympathize with others and try to put ourselves in their place in order the better to understand them, that is, the better to anticipate their responses. In addition to taking the role of others, there is the necessity of filling the roles of the positions we occupy, which may be numerous. Mrs. X may be an only child in a middle-class minister's family; a college graduate; an ex-nurse; the wife of a physician; the mother of two adolescent boys; a Sunday School teacher; a member of a bridge club. These phrases tell us something about the roles of Mrs. X; but if we wish to know better what her behavior is like, we need additional information about her church, whether it is, say, Presbyterian or Mormon; the size of the community she lives in; the nature of her husband's practice, etc. This information would tell us more about her formal roles in the community, but it would still leave unanswered the question of the nature of her informal roles. In Mormon culture, for instance, the man is the head of the household; and presumably therefore part of his role in the family is to make decisions affecting the welfare of the family. Navaho culture on the other hand tends to favor the women. But Strodtbeck's study [2] of a number of Mormon and Navaho couples reveals the importance of both group and cultural factors in marital roles. The couples were assigned the problem of choosing the best of three families of their acquaintance. It was found that where there was disagreement between spouses, the Navaho husbands won 34 decisions, while their wives won 46; the Mormon husbands, on the other hand, won 42 decisions, their wives only 29. So there appears to be a cultural influence but also the influence of the interpersonal relationship. The culture may favor the men and give them the decision-making role, but in a particular marriage the wife may be the power behind the throne. Incidentally it is interesting to learn that the spouse who did most of the talking usually won the decision.

Role conflicts increase in a heterogeneous, rapidly changing society. In a sim-

[1] Walter Coutu, "Role Playing Versus Role Taking: An Appeal for Clarification," *American Sociological Review*, 16: 180–187, April 1951.

[2] Fred L. Strodtbeck, "Husband–Wife Interaction Over Revealed Differences," *American Sociological Review*, 16: 468–473, August 1951.

ple, culturally homogeneous, relatively stationary society, there are comparatively few role conflicts. Those that occasionally arise are familiar ones, for which long experience has generally provided solutions. For example, the father who is the loving parent becomes when necessary the stern disciplinarian, ordinarily with a minimum of conflict. However, in a rapidly changing society, like that in the United States in the middle of the twentieth century, the variety of groups with differing norms is great, leading to clashes of expectations, reflected in role conflicts. For the individual there is sometimes confusion about what is appropriate. Does, for instance, a university president fraternize with his academic staff? Again, the individual may find himself with incompatible roles, as in the case of the doctor who must sacrifice in some measure his family life in the interests of his profession. In addition, there are role conflicts involving two or more individuals who are authorized to perform the same or highly similar functions in the same situation, as when city police and sheriff's deputies disagree on who has jurisdiction in a particular case. Finally the roles of two or more individuals may be in conflict because their functions are not consistent with their status. Whyte [3] has shown that the cook in a commercial restaurant generally has a higher status than the waitress but has to take orders from her. The solution is generally sought in interposing some mechanical system for relaying orders. So we conclude that roles in modern society may be numerous, complex, highly diversified, and sometimes in conflict.[4]

Ascribed roles. How does the individual get his roles? Since the business of society is continuous and important and cannot safely be left to chance, societies assign certain roles to their members. In all societies, roles are ascribed on the basis of age and sex, and the classification serves as a prerequisite to all other positions in the society. The age–sex classification is perhaps the most important single basis for determining the participation of the individual in the culture.[5] The number of sex–age groups varies from culture to culture. The Inca of Peru had ten age groupings for males alone, but a minimum of seven categories appears to be basic to all systems of age–sex classification: infant, boy, girl, adult man, adult woman, old man, old woman.[6] The adolescent period is not clearly demarcated from other stages in some societies, ours among them; whereas in Polynesia adolescents are sharply differentiated from both adults and young children and are relieved of most domestic and community responsibilities in order to be free for courting and other activities of personal adjustment. Polynesian youth are said to make good adjustments and to be free from the storm and stress that characterize adolescents in our society.[7] In the United States we do not recognize any special shift in status at adolescence; marriage and/or the assumption of full-time paid employment brings adult status, at which time there is a rather abrupt change from dependent to independent roles.[8] With us, age-grading, except for the educational system, does not entail formal age categorization but is interwoven with other institutional elements.[9] For instance,

[3] W. F. Whyte, "The Social Structure of the Restaurant," *American Journal of Sociology*, 54: 302–310, January 1949.

[4] The concept of role is considered further in Chapter 10, "Group and Personality."

[5] Ralph Linton, *The Cultural Background of Personality* (New York: Appleton-Century-Crofts, Inc., 1945), p. 64.

[6] Ralph Linton, "Age and Sex Categories," *American Sociological Review*, 7: 589–603, October 1942.

[7] Margaret Mead, *Coming of Age in Samoa* (New York: William Morrow & Co., Inc., 1928).

[8] Ruth Benedict, "Continuities and Discontinuities in Cultural Conditioning," *Psychiatry*, 1: 161–167, 1938.

[9] Talcott Parsons, "Age and Sex in the Social Structure of the United States," *American Sociological Review*, 7: 604–616, October 1942.

we have in many jurisdictions a separate body of law and set of institutions for adult criminals and juvenile delinquents. Many societies consider the transition from one age category to another an occasion for a public ceremony; and since the occasion signals the transition from one set of roles to another, these ceremonies have been named by the anthropologist "rites of passage."

Age as a basis of role allocation is important in all societies. But an analysis [10] of the relation of age groups and type of social structure makes out a case for the view that in societies organized on a family or kinship basis, the principal emphasis is on the relationships between persons of different ages. On the other hand, there is evidence that homogeneous age groups tend to develop especially in two situations: (1) in societies organized on a civil rather than a familistic basis, as in modern urban, industrialized Western nations; and (2) in familistic societies where the family structure is authoritarian, as in the Murngin tribe of Australia. In both situations, the youth is hindered from attaining full social status through identification with the age-heterogeneous members of the family, which leads to the establishment of youth groups, clubs, cliques, Scouts, gangs, fraternities, organizations, and movements. Homogeneous age groups of children or adolescents exist in all societies, as in play groups; but under the two special conditions indicated above, these groups become more highly articulated.

Hand in hand with age-grading goes sex-typing. All cultures mark off males from females and have separate bodies of habits and attitudes which are deemed appropriate for either sex. Such cues as differences in clothing, hair-do, and body paint are useful in helping the sexes to make appropriate overt responses to each other and to themselves. In all cultures there is sex division of labor, usually sharp, and generally the roles of men and women in the religious life differ.

Other roles are ascribed to the individual on the basis of the social position of his family, especially the social class position which will be discussed more fully in later paragraphs. The son of a king is supposed to be educated in the ways (roles) of a prince, a very special and exacting type of training for the position he will later hold. A child's roles may also be affected by the occupation of his father, as in the case of the more decorous behavior expected of the sons and daughters of ministers.

Achieved roles. Not all of the roles of the individual are the result of ascription by the society. A person through his own efforts can in some measure change his roles, as college students generally expect to do as a result of their schooling. All societies provide such opportunities, but in different degrees, as we shall see below.

SOCIAL STRATIFICATION

Society compares and ranks individuals and groups. Members of a group compare differing individuals, as when selecting a mate or employing a worker or dealing with a neighbor. They also compare groups such as athletic teams, colleges, cities. These comparisons are valuations, or judgments of relative worth; and when members of a group agree, these judgments are social valuations.

Status is the result of the ranking of a role by a group. All societies differentiate their members in terms of roles and all societies evaluate roles differentially. Some roles are regarded as more important or socially more valuable than others, and the persons who perform the more highly esteemed roles are rewarded more highly. Thus is introduced the idea of *status*, which is the rank-order position assigned by a

[10] S. N. Eisenstadt, *From Generation to Generation: Age Groups and Social Structure* (Glencoe, Ill.: The Free Press, 1956).

group to a role or to a set of roles. Status is thus created by the opinions of others. These others act as judges of our roles and conduct.

When groups are ranked with some degree of permanence, there is stratification. The process by which individuals and groups are ranked in a more or less enduring hierarchy of status is known as stratification, probably because of the figurative resemblance of social hierarchies to the sedimentary rocks in layers in the earth's crust. But there is considerably less permanence in the social hierarchies than in the geologic strata.

There is some stratification in all societies. The functional imperative of inequality of status is present in all societies, even in those which have an ideology precluding social classes. In the new state of Israel there are a number of collective or communistic farming settlements, although they constitute a small minority of all farms. In these *Kibbutzim* the land, farming equipment, houses and furnishings are owned by the group as a whole and no wages are paid. Food, clothing, and shelter are furnished by the *Kibbutzim,* plus a small sum of money for incidentals. So there are no significant differences in wealth and no economic classes. Two groups of individuals are favored, however.[11] They are the managers or administrators, and the old-timers. A person who is both one of the pioneers and a manager is doubly esteemed. The rewards are not in money but in prestige, power, and perquisites. The managers are freer to leave the settlement since they have occasion to represent the group in dealings with outsiders. They also make decisions affecting the other members of the collective farm. They, as members of a committee, decide, for instance, how much spending money each member shall receive.

A comparable, though less extreme, example is Greenbelt, Maryland, a planned suburb built by the federal government in 1937. Included in the plan was an effort to minimize stratification by choosing as residents families of similar economic resources and by organizing economic services along cooperative lines. Status segregation could not occur because of the planned nature of the town. Yet in four years a definite status structure had developed, consisting at the top of the officials selected by the federal government to oversee the town and at the bottom the town's maintenance laborers and a group of Jews.[12]

Since status is the product of group evaluation of a role, there are ascribed and achieved statuses as there are ascribed and achieved roles. Roles and status are achieved via the process of competition, where superior roles and statuses are limited in number and the demand for them exceeds the supply.

The status-fixing function of competition. That the function of competition and conflict is to fix the status of the contestants, and that this is generally effected in terms of superordination and subordination, is brought out by certain observations of the animal world. For example, it has been observed that a definite "pecking order" is established among hens when they are grouped. Hen A pecks Hen B, but the latter does not retaliate. Instead B pecks C, while C takes it out on D. There are some curious and unexplained sequences, for D may peck A. In part the pecking order results from previous encounters where the relative prowess of the hens was determined, but also it may be due in part to accident.

Since the pecking order does not involve the opinions of others and hence any social valuation, it would be more accurate to refer to the competition among hens as

[11] Eva Rosenfeld, "Social Stratification in a 'Classless' Society," *American Sociological Review,* 16: 766–774, December 1951.

[12] William H. Form, "Status Stratification in a Planned Community," *American Sociological Review,* 10: 605–613, October 1945.



57 Pecking Order of Hens

A hierarchy of status exists among hens, established by overt conflict. In a flock, one hen tends to be dominant over the rest, but sometimes there are irregularities in pecking order. *A* may peck *B*, *B* peck *C*, and *C* peck *D*, but *D* pecks *A*. A major function of competition and conflict is to fix the rank order of contestants. (Photo by Wallace Kirkland, Courtesy LIFE Magazine, © Time Inc.)

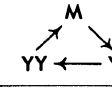
affecting the rank order rather than the status. Ranking is a phenomenon which may occur as a result of the competitive process, without any social valuation.

In one study, a flock of thirteen brown leghorn pullets was patiently watched for sixty days, and the pecks received and delivered were recorded. The peck order of this flock is shown in Table 4. It will be observed that there is a regular line organization down to the eighth bird, when an irregularity occurs. At this point a triangular relationship appears, M pecking Y, Y pecking YY, and YY pecking M. Such irregularity is due to accidents of one sort or another. YY may have met M for the first time on one of its off days, gained an advantage in the encounter, and retained it with the aid of the psychological dominance thus established.

A similar hierarchy of rank, of superordination and subordination, may be observed among the primates. The stronger male baboons build up harems of females which they protect from the advances of the weaker males. The leadership in these cases, as among the hens, is settled by earlier overt combat among the males. Among human beings, a comparable situation exists in boys' gangs where the chief is likely to be the fel-

TABLE 4 · Social Hierarchy of a Flock of Hens*

RW pecks all 12	A, BG, BB, M, Y, YY, BG_2, GR, R, GY, RY, RR.
RR pecks 11	A, BG, BB, M, Y, YY, BG_2, GR, R, GY, RY.
RY pecks 10	A, BG, BB, M, Y, YY, BG_2, GR, R, GY.
GY pecks 9	A, BG, BB, M, Y, YY, BG_2, GR, R.
R pecks 8	A, BG, BB, M, Y, YY, BG_2, GR.
GR pecks 7	A, BG, BB, M, Y, YY, BG_2.
BG_2 pecks 6	A, BG, BB, M, Y, YY.
YY pecks 4	A, BG, BB, M.
M pecks 4	A, BG, BB, Y.
Y pecks 4	A, BG, BB, YY.
BB pecks 2	A, BG.
BG pecks 1	A.
A pecks 0	

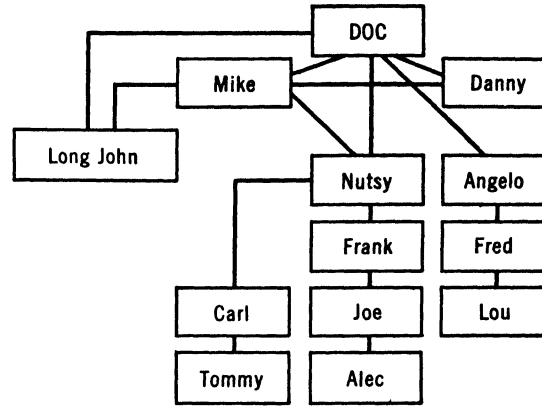


*From W. C. Allee, *The Social Life of Animals* (New York: W. W. Norton and Company, 1938), p. 178.

low who can beat up all the rest, or who excels the rest in exploits which call for courage.[13] The hierarchal arrangement of a gang of young men, based on power and influence, is shown in Figure 58. Competition and conflict, past and present, play a significant part in determining the status of individuals and groups.

Among animals, size appears to be an important factor affecting the outcome of conflict. The bigger animals have an advantage over the smaller. Since males are usually larger than females, the former have an advantage in combat; cockerels prevail over hens in pecking order. Among children, likewise, physical superiority plays an important part in determining the outcome of clashes. This is brought out by a study of eighteen infants between twenty-one and thirty-three months of age, with IQ's ranging from 90 to 159, at the Child Development Institute of Columbia University. These children were observed during their free-play period; and it was noted that the greatest number of conflicts were won by the less intelligent, taller, older, heavier children. An advantage in weight was the most important factor.[14] It is interesting to conjecture whether in the days of the cave men, the greater strength of the male may not have become a factor in the subjugation of women.

Among mature human beings, however, competition generally takes place on the psychological rather than the physical level. Society seeks to prevent conflicts between persons from taking direct, physical form, because of the disturbing effects of such uncontrolled conflict on group life. Physical dominance is socially esteemed mainly in its socialized forms; for instance, prize fighting according to rules is valued, but street fighting is condemned.



58 Hierarchical Arrangement of Members' Positions and Lines of Influence in the Nortons

The informal organization of a gang of "corner boys" (men in their twenties and thirties) in an Italian section of the city. The existence of a hierarchy is seldom explicitly recognized by the members. Leadership results from influence over members and over other groups, such as politicians. (From W. F. Whyte, *Street Corner Society*, Chicago, The University of Chicago Press, 1943.)

If there is no competition for food, there is no pecking order among hens. This can be seen in Figure 59, which shows a portion of a poultry farm where broilers are fattened up for the market before they are slaughtered. Among men there is competition not only for food and other goods but for power and reputation.

Involved in *social stratification* is the extremely important point of social inequality. Some individuals and groups are rated higher than others, and with such differences in rating go differences in opportunities and privileges. For example, using survey research methods and a national representative sample, it has been found that in the United States doctors are rated higher than college professors.[15] That is, as a class they

[13] F. M. Thrasher, *The Gang* (Chicago: The University of Chicago Press, 1927).

[14] E. Kumlin, *The Conflicts and Resistant Behavior of Eighteen Children in a Nursery School* (Master's thesis, Columbia University Library, 1933).

[15] Richard Centers, "Social Class, Occupation, and Imputed Beliefs," *American Journal of Sociology*, 58: 543–555, May 1953.

have a higher prestige rating. They also have a larger income, one of the rewards of preferential status. It is not entirely clear on what bases these prestige ratings are made, but some of the considerations are said to be the amount of training required and the degree of responsibility for public welfare.[16] Ratings depend on the values of the culture which may vary from place to place and from time to time in the same place, although over a limited period of time the ratings tend to be stable.

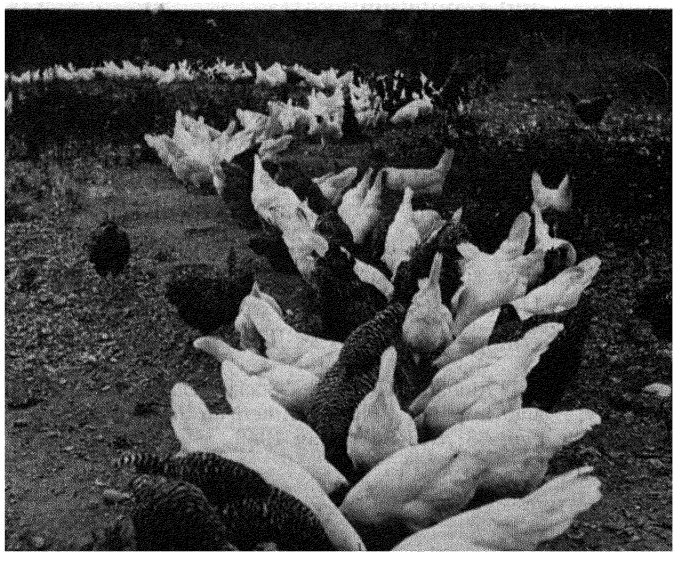
Since status is relative position or rank in a group, the assignment of status depends upon both (a) the nature of the group which is making the evaluation and (b) the group membership of the individual being ranked. The ratings of doctors and college professors mentioned above are national ratings, statistical averages of ratings made by a plurality of groups. There are marked differences in ratings according to certain background characteristics of the raters, such as section of the country lived in, size of place, urban or rural residence, rater's occupation, age, sex, education, economic level, and so on. So a person's judgments of status depend on his own position in the social structure. In addition, status is a function of the group being ranked. In a study of social cleavages in women's organizations in New Haven,[17] it was found that racial cleavages were the sharpest, religious cleavages the most pervasive, with ethnic divisions being contributory. There were seven Junior Leagues in New Haven: Protestant, Catholic, Jewish, Negro, Swedish, Italian, and Polish.

Role and status conflicts. Classically, the status structure of society has been described as a single hierarchy. We have been inclined to speak of persons as having high, intermediate, or low status. This unidimensional view is unrealistic, for, as we have seen, people play a number of roles and each one is rated. Still no harm is done by the single categorization if the several statuses are highly correlated, which is usually the case. The situation is different where there are contradictions of status, as in the case of the highly educated man with a very low income or the business executive with a limited education.[18] Because in general the coexisting parallel status hierarchies are im-

[16] National Opinion Research Center, "The Quarter's Polls — Occupations," *Public Opinion Quarterly,* 11: 658–664, 1947–48.

[17] Mhyra S. Minnis, "Cleavage in Women's Organizations: A Reflection of the Social Structure of a City," *American Sociological Review,* 18: 47–53, February 1953.

[18] Everett Hughes, "Dilemmas and Contradictions of Status," *American Journal of Sociology,* 50: 353–359, March 1945.



59 Chickens Without Rank Order

On a poultry farm where chickens are given food rich in vitamins and fattened up for the market, there is no competition for food. And with no competition for food, there is no pecking order. (Photo by Gregor from Monkmeyer.)

perfectly correlated there is need for a measure of the consistency of status, which has been termed status crystallization.[19] Such a measure has been developed for status in the four hierarchies of income, occupation, education, and ethnic affiliation. The higher the intercorrelation of a person's rank-order positions in each of the four hierarchies, the more highly "crystallized" his status is said to be. As an indication of the significance of the measure, high and low crystallization groups were compared in their voting behavior. The proportion of respondents supporting the Democratic Party is substantially greater in the low crystallization category and there is an association between low crystallization and political liberalism.

Another common type of role–status conflict is the conflict between formal and informal roles and statuses. In a large university there were two members of the social science faculty who were good friends, and their wives were good friends, too. One of the men in the course of time became president of the university. Shortly afterward his wife approached the wife of the colleague and said she greatly regretted that their intimate contacts must come to an end, that as the President's wife she would not be in a position to have personal relations with any of the faculty wives. And so their friendship moderated. This president and his wife defined their professional role, as do many executive officers in similar positions, as impartial and impersonal and therefore as incompatible with the special claims of friendship.

Reputation, popularity, and status. We are using the term status to mean the product of the evaluation by a group of a role or set of roles. There are two other kinds of role-evaluation, however, that need to be distinguished from the assessment of status. These concern reputation and popularity. Status is impersonal and has to do with respect for the office. Thus we refer to the status of the presidency of the United States, without regard to the incumbent. Reputation, on the contrary, is personal and results from the manner in which the executive functions, whether he "acts right," is competent, and manifests other virtues. Popularity is also personal but is concerned more with a liking for the person. These distinctions are important, because they indicate that the group values the office, regardless of who fills it. Competence is generally desired, and popularity, too; but the basic requirement is that the activities represented by the role shall be carried on. The king is dead; long live the king.

[19] Gerhard E. Lenski, "Status Crystallization: A Non-Vertical Dimension of Social Status," *American Sociological Review*, 19: 405–413, August 1954.

Social Class

The status that is generally most emphasized is social class. Since status is the result of evaluation of position in a group, a person has as many statuses as he has group affiliations. In very small communities, like those of many primitive peoples, where the same individuals participate in all the groups, a person may have only one status, but this is seldom true in complex modern society. For example, Mr. Smith has status as a male, an adult, a husband, and a father. He is quite the patriarch and is so regarded by his family. Mr. Smith also has status in the local Baptist church, of which he is a member, but in which he holds no office and plays no distinctive role. Mr. Smith has status, too, in his occupational group. He has been an assistant professor in a small college for more than fifteen years, with little hope of advancement, perhaps because he is regarded by his students and colleagues alike as a poor teacher. It is generally felt that he continues to hold his position only because his family has long been associated with the college in one official

capacity or another. The Smiths have ample private means, belong to the best clubs, and move in the best circles.

The term status is used in the singular, suggesting that status may be generalized, that the status of a person is the sum total of all his separate statuses, but it is doubtful that this concept is valid. It is difficult to see how statuses can be added up, any more than how two apples and two oranges can be added. When we speak of a man's social status, we ordinarily make not a generalization but a selection. We have in mind one status in particular: his social-class status. We consider the family to which he belongs, the size of his fortune, the circles in which he moves. In thinking of Mr. Smith's status, we pass over his neutral status in the church and his inferior status as a teacher, and dwell largely on his status in the social set.

Class status seems to overshadow all other kinds of status. Most people in our culture would prefer to be identified with the upper class because it is correlated with power, a high standard of living and with social acceptability, although a scientist, let us say, might care a great deal more about his status as a research worker, or a scholar about his reputation in his profession.

In addition to the age and sex categories in which he is placed, every individual is at birth assigned to a particular social class. By a social class we mean one of two or more broad groups of individuals who are ranked by the members of the community in socially superior and inferior positions. Persons of both sexes and of all ages are included in a social class, which is mainly a group of families of comparable status, augmented by a number of individuals whose social status is higher or lower than that of their parents.

Where societies are composed of social classes, the social structure generally resembles a truncated pyramid, with the lowest social class at the base and the other social classes arranged above it in a hierarchy of rank and distinction. In Rome, for instance, there were the slaves, the large plebeian or common class, and the five superior classes. In medieval European society the base of the social pyramid was occupied by the *theow* class. Successively higher in rank were the *cotters, villains,* free tenants, and lesser gentry, with the nobility, royalty, and ecclesiastical officials at the top. The members of the *theow* class were slaves, hence could be sold at will. The *cotters* and *villains* were serfs bound to the soil who could be sold into the services of every purchaser. The free tenants had land of their own, but were required to do a certain amount of work and pay certain fees to their lords. All governmental power rested in the hands of the nobles, the ecclesiastics, and the king.

Criteria of class as historically defined. We need at this point to examine the concept of class more closely. The criteria of class as traditionally viewed have been: (1) size, (2) a common culture affecting rights and duties, (3) fixity, (4) distinguishing insignia, (5) barriers, and (6) some antagonism. Classes have meant large groupings, extending sometimes beyond national boundaries throughout a cultural area, as in the case of knighthood. Or, again, the English aristocracy has thought that it had more in common, culturally, with the aristocracy of continental Europe than with the English peasants. Because social classes have been large, they have been few. They have been based on occupation and property, leading to differentials in power, in opportunities, and in cultural traits. Such classes have been found fully developed in heterogeneous agricultural societies where the rate of social change is not great, permitting considerable stability and a relative fixity of classes. To help differentiate them, classes develop distinguishing earmarks like special titles, dress, speech, and manners. Important to the concept of classes is the social distance that separates them, that prevents much mobil-

ity, and that helps to preserve the class system. All of these factors lead to class pride, consciousness of kind, maintenance of standards, role and status differences, discrimination, and sometimes conflict and aggression.

In rapidly changing modern urban America, traditional social classes are nonexistent or imperfectly developed. It is clear that the United States in the middle of the twentieth century is highly stratified in terms of income, occupation, and education, but in a rapidly changing urban society, the traditional type of social class is not to be found or is imperfectly developed, though the term social class persists. In its place we find the universal phenomena of role, status, strata, pride, and discrimination in other groups such as occupations, income brackets, the sexes, minorities, races, and ethnic groups, but with lower barriers and greater social mobility than in rural class societies. It is these other groups to which the term social classes is now applied in the United States.

Evidence of the foregoing is the difficulty of defining class boundaries in the United States. The population of Citrus City, a community of about 4,200 in the valley below California's Sierra Madre which probably resembles most small towns in the United States in its integrated social life, did not differentiate social classes sharply.[20] Social-class identification depends somewhat on the categories used. When a sample of residents in Minneapolis were asked to identify their social class, and three classes were presented, over three-fourths identified with the middle class, except in the lowest rental area; whereas when four classes (upper, middle, working, lower) were presented, the majority, except for those in the highest rental area, identified with the working class. When no classes were suggested, 11 per cent identified with the working class; 31 per cent with the middle class; 20 per cent did not know their class; and 14 per cent believed there were no social classes or did not identify with any.[21]

Again, the concept of class appears to differ between Los Angeles and Spokane.[22] It takes more money and better housing for respondents in Spokane to identify themselves as middle-class than in Los Angeles. Data like these have led social scientists[23] to ask whether the concept of social class is substantive or classificatory, real or artificial. Socio-economic status is a continuum. Can we take this continuum and divide it up into, say, upper, middle, and lower classes, as is generally done? How shall we know where to draw the line? Social classes are large, inclusive groups arranged in a hierarchy of status.

An essential characteristic of classes is the barriers between them, and a significant question regarding a particular class system is the extent of the barriers that separate the classes. The barriers concern social interaction and, specifically, intermarriage, sociability, eating together, working together, living in the same neighborhood, and so on. The society of medieval feudal Europe was clearly class-structured; the society of the United States in the 1950's is clearly less so. A phenomenon like social class may be very important without being universal; or universal, without being uniform. Where class lines are not sharply drawn, as in the United States, where there is no distinguishing class name or dress, it is more difficult

[20] Thomas E. Lasswell, "A Study of Social Stratification Using an Area Sample of Raters," *American Sociological Review*, 19: 310–313, June 1954.

[21] Neal Gross, "Social Class Identification in the Urban Community," *American Sociological Review*, 18: 398–404, August 1953.

[22] John L. Haer, "A Comparative Study of the Classification Techniques of Warner and Centers," *American Sociological Review*, 20: 689–692, December 1955.

[23] August B. Hollingshead, "Community Research: Development and Present Condition," *American Sociological Review*, 13: 136–156, April 1948; Gerhard E. Lenski, "American Social Classes: Statistical Strata or Social Groups?" *American Journal of Sociology*, 58: 139–144, September 1952.



60 The Class Structure of the Mardi Gras

Mardi Gras, a time of carnival, is celebrated in New Orleans, where class lines are probably somewhat more sharply drawn than in most American cities. The parades, balls, and festivities are organized on class lines. As the climactic event of two balls held the night before the Mardi Gras, Rex goes behind the partition that divides the two balls and does obeisance to Comus. It is reported that Rex may be lower-upper class, but King Comus must be upper-upper. (Photograph by *The Times-Picayune*.)

to identify classes. But even in England, where class lines are acknowledged and more readily recognized, there are still difficulties in delineating class. Lewis and Maude consider the middle class to make up 33.5 to 37.5 per cent of the population, whereas the Institute of Public Opinion gives the figure as 47 per cent.[24]

A limitation of stratification studies is that they are nearly always concerned with local communities. Empirical studies of stratification in whole societies are rare. Studies in the local community, moreover, have dealt mainly with variations in prestige and social position. This concept, emphasizing status differences, has been sharply criticized as a feeble concept[25] compared with the historic idea of social class, developed by social philosophers and social scientists since Aristotle, and reaching a climax in the writing of Karl Marx, whence the idea of class has been associated with the powerful ideas of class hatred and class struggle, emphasizing property, and especially the means of production. Marx taught that the essential division is between the haves and the have-nots. Marx recognized the emerging middle class of his time but erroneously believed this class would disappear. Marx conceived of class in terms of power — economic and political power. When the power of the ruling class (e.g., the bourgeoisie) is threatened by the rise of the oppressed class (e.g., the proletariat), the class conflict becomes overt, as in the French, Russian, and Chinese revolutions. Where classes are in conflict, there is of course an awareness of the conflict and an awareness of class, or class-consciousness. Some recent studies indicate that class conflict is not unimportant in some societies at present. Dutch unskilled workers, according to Haveman, have been alienated from the "official culture" of Dutch

[24] Joel B. Montague, Jr., "Some Aspects of Class, Status, and Power Relations in England," *Social Forces*, 30: 134–140, December, 1951.

[25] Kurt Mayer, "The Theory of Social Classes," *Harvard Educational Review*, 23: 149–167, Summer 1953.

society, and Bottomore suggests that French wage-earners have been so completely alienated from "official" France that they refuse to make use of the ladder of mobility provided by the higher public services.[26]

Criteria of class in empirical studies. As indicated, studies of social class in local communities have been mainly concerned with prestige ratings. The ideological bases of social class, emphasized by the classical theorists, have been largely ignored, although studies in European societies show ideological considerations to occupy a prominent place in the determination of social class.[27] Some empirical studies of social class use a single criterion, usually occupation. More common is an index based on multiple criteria. The best known and most widely used is the so-called I.S.C. (Index of Status Characteristics) developed by Warner and his associates, a weighted score based on occupation, source of income, type of dwelling, and character of neighborhood. Another method is the ranking of residents by local judges, a method designated by Warner as E.P. ("evaluated participation"). Still another method uses self-placement, with individuals designating the social class to which they believe they belong. These several methods of class placement are highly correlated. A correlation as high as .972 has been found for E.P. and I.S.C., and one of .91 between E.P. and occupation alone.[28]

The Consequences of Social Stratification

Social class affects "life-chances." Practically, the significance of a class system lies partly in the fact that it determines the social rewards of people. The members of a particular class have more or less the same "life-chances," that is, the same probability of securing the good things of life, such as freedom, a high standard of living, leisure, deference, or whatever things are highly valued in a given society. "The influential," as Lasswell aptly puts it, "are those who get the most of what there is to get."[29] Hence if we regard a social class as a group based on certain resemblances of its members, we must view it as a group of persons with similar social chances.

How do the social chances of different classes, say the rich and the poor, vary in our own society? Let us consider the chances of staying alive. What chance of surviving the first year of life does the average baby born into a lower class American family have compared with a baby born into a middle class family? The infant mortality rates (number of deaths under one year of age per 1000 live births) for seven cities studied by Woodbury showed a decrease with increasing family income, as shown in Figure 61. In these communities, babies in families having $450 a year had about three times as many chances of not surviving the first year of life as did babies in families with an annual income of $1250.

Since the famous Woodbury study, there have been no data on infant death rates for United States families classified by income. The effort by public health agencies to reduce infant mortality may have narrowed the differential between high and low income families. That they have not eliminated it is indicated by the infant mortality in 973 cities in 1939–40 classified by average per capita income.[30] In the cities where the

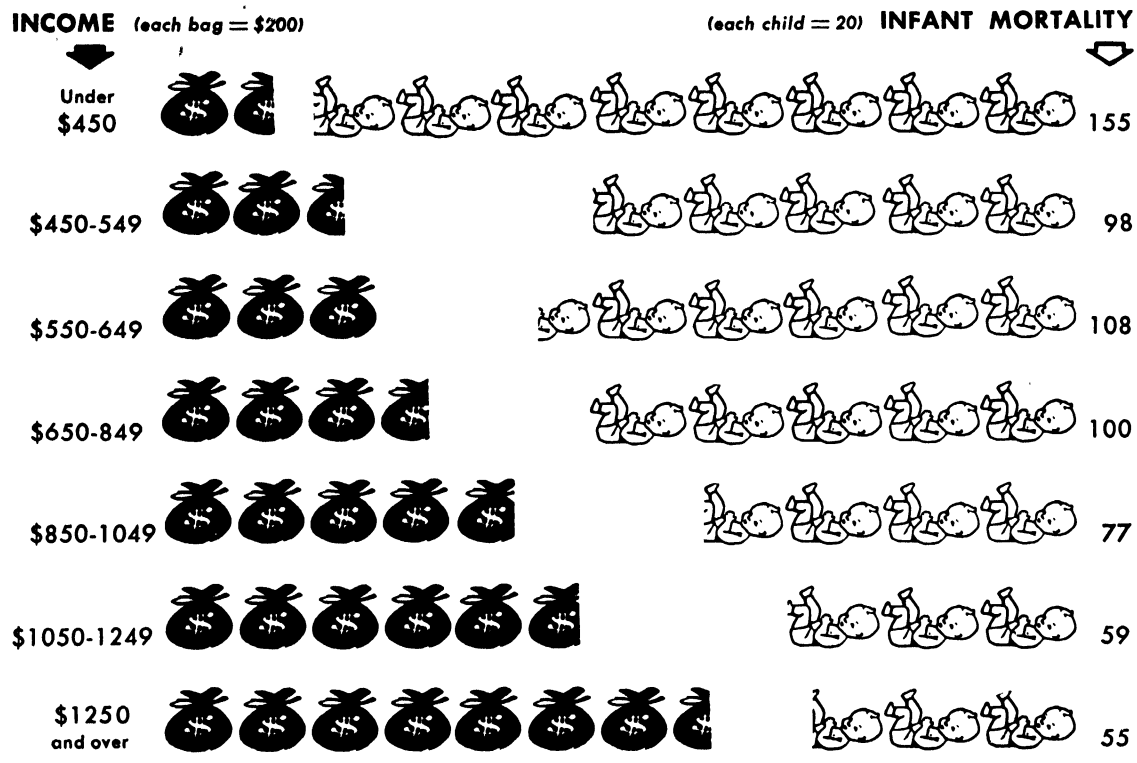
[26] *Current Sociology* (No. 1, Social Stratification), Vol. II, No. 1, 1953–54, p. 17.

[27] Sakari Sariola, "Defining Social Class in Two Finnish Communities," *Transactions of the Westermarck Society*, Vol. 2, 1953.

[28] Paul K. Hatt, "Stratification in the Mass Society," *American Sociological Review*, 15: 216–222, April 1950.

[29] Harold Lasswell, *Politics: Who Gets What, When, and How* (New York: McGraw-Hill Book Company, Inc., 1936), p. 3.

[30] M. E. Altenderer and B. Crowther, "Relation Between Infant Mortality and Socio-Economic Factors in Urban Areas," *Public Health Reports*, 64 (11): 331–339, March 18, 1949.



61 **Infant Death Rate by Income Level**

The infant death rate is higher among the poor than among the rich. These figures for pre-World War times show a lower level of income than is prevalent now, but more recent studies based on rentals support the same conclusion. One way to lower the infant death rate would be to raise the income level. The infant mortality rate of 108 per 1,000 for the income group $650–$849 has been called 100 and all the others scaled accordingly. (Data from Robert M. Woodbury, "Infant Mortality in the United States," *Annals of the American Academy of Political and Social Science*, 188:102–104, November 1936.)

per capita income was under $675 a year, the infant deaths per 1000 live births numbered 47.8. When the income was between $675 and $850, the infant mortality rate was 42.6, and when the per capita income was over $850 a year, the infant death rate was 38.8. In computing these rates, hospitalization rates, the percentage white, and the size of city were held constant. It may be concluded that the cities with high incomes have fewer infant deaths than the cities with low incomes.

Despite this selective influence, which probably means that those with sounder physiques tend to survive, the babies that grow up to be men and women of the lower class do not have such good chances of staying well as do those with more income. In 1935–36, about one third of all the families in the United States, or about 40,000,000 persons, received incomes of less than $800 for the year,[31] and of this group, one half were on public relief. A national health survey[32] during the same period showed that the number of family heads not seeking work because of chronic disability was one in 20 for relief families, one in 33 in non-

[31] National Resources Committee, *Consumer Income in the United States* (Washington, D.C.: Government Printing Office, 1939), p. 18.

[32] *Illness and Medical Care in Relation to Economic Status* (Washington, D.C.: The National Health Survey, 1935–1936, Bulletin No. 2, 1938).

relief families with incomes under $1000, and only one in 250 in higher income groups.

The poorest people were those most frequently sick, there being 57 per cent more illnesses disabling for a week or more among relief families than among those with incomes of $3000 or more. The relief families were also sick longer, the average case of disabling chronic illness lasting 63 per cent longer than among those in the higher economic brackets. Despite much less frequent and serious illness, families with incomes of $3000 or more secured 46 per cent more medical service, as measured by number of calls from a physician, than did relief families. The chances of staying well and of obtaining medical attention if ill are seen to be correlated with social class.

The chances of survival in wartime in the armed forces are positively related to economic status. As Table 5 shows, the casualty rates become progressively lower as the income level rises. The explanation is probably that those with more income usually get more education and the higher a man's education, the less likely he is to be stationed in a more exposed combat area. Also there are relatively more recruits from the lower economic levels.

Table 5 · Korean War Casualty Rate per 10,000 Occupied Dwelling Units, by Median Income of Census Tract, Detroit, Michigan*

Median Income	Casualty Rate per 10,000 Occupied D.U.'s
Under 2500	14.6
2500–2999	10.8
3000–3499	9.1
3500–3999	8.6
4000–4499	7.5
4500–4999	6.6
5000–5499	5.8
5500 and over	4.6

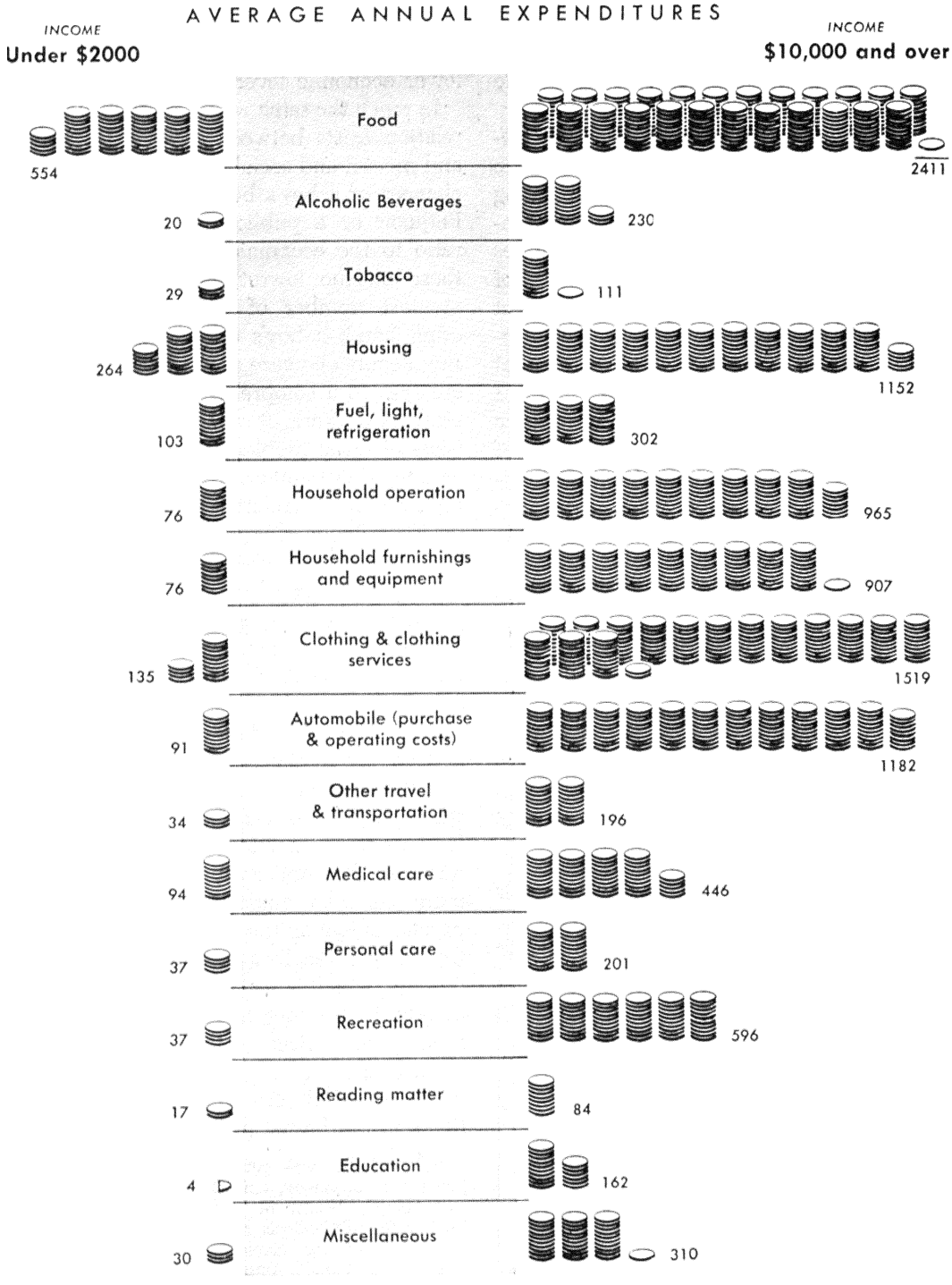
*Albert J. Mayer and Thomas Ford Hoult, "Social Stratification and Combat Survival," *Social Forces*, 34: 155–159, December 1955.

In much the same way, a high positive correlation exists between social-class position and mental and social health generally. The chances of a boy's becoming a juvenile delinquent or a public charge are in direct ratio to the economic status of his family, those on the lowest levels furnishing the greatest number of delinquents. On the other hand, a boy's chances of joining the Boy Scouts decrease as his family status decreases. In a comprehensive study of Rochester, New York, it was found that various types of social problems were most prevalent among relief families, the index of social disorganization correlating .94 with relief.[33]

Using diagnosed psychiatric disorders in New Haven, the wealthiest class, comprising 3.1 per cent of the population, had 1.0 per cent of the psychiatric disorders, while the poorest 17.8 per cent of the population had 36.8 per cent of the psychiatric patients. Schizophrenia, the most common type of mental disorder, was more than eleven times as frequent in the bottom as the top class, and there is evidence that these lower-class schizophrenics did not simply drift down from upper economic levels as their mental disorder became severe. Neuroses were more common among the higher classes, psychoses among the lower classes. Type of treatment varies by social class also. Psychotherapy, which is lengthy and costly, is used mainly in treating members of the upper social levels. Organic therapies tend to be applied most often to the middle groups, while custodial care is given largely to patients in the lowest positions.[34]

[33] The index was compounded of the rates of juvenile delinquency, child neglect, membership in Boy Scouts, density of population, size of family, birth rate, tuberculosis rate, and death rate. Raymond V. Bowers, "Ecological Patterning in Rochester, New York," *American Sociological Review*, 4: 180–189, April 1939.

[34] A. B. Hollingshead and F. C. Redlich, "Social Stratification and Psychiatric Disorders," *American*


AVERAGE ANNUAL EXPENDITURES
INCOME
Under $2000
INCOME
$10,000 and over
Food
554
2411
Alcoholic Beverages
20
230
Tobacco
29
111
Housing
264
1152
Fuel, light, refrigeration
103
302
Household operation
76
965
Household furnishings and equipment
76
907
Clothing & clothing services
135
1519
Automobile (purchase & operating costs)
91
1182
Other travel & transportation
34
196
Medical care
94
446
Personal care
37
201
Recreation
37
596
Reading matter
17
84
Education
4
162
Miscellaneous
30
310

It is interesting to inquire how the chances a boy or girl has of going to college are affected by social class. Despite the fact that a good deal of higher education is provided by the state at a low cost to the student, an extensive investigation [35] of all Minnesota high school graduates in 1938 and 1950 indicates that 67 per cent whose fathers were professional and semi-professional men entered college as compared with 26 per cent whose fathers were factory workers, craftsmen or unskilled workers.

What are the chances of the lower class obtaining justice in the courts? Much is made of "equality before the law" in our culture, but such equality exists in principle rather than in fact. We are so accustomed to thinking of crime in lower class terms that when we picture criminals we usually visualize burglars, thieves, and gangsters, and seldom consider white collar criminals [36] or criminals in high places. Since it costs money to ask for justice, notwithstanding the legal-aid clinics available to the poor in a few places, the poor are less likely to seek redress for wrongs. If charged with a criminal offense, a poor man is under a substantial handicap. Except in extreme cases like murder, the rich man so charged will be summoned, then released on bail. The poor man is likely to be arrested, and in default of the bail which he cannot furnish, will be remanded to jail — not the best place to build up a defense against the charges. The rich man may secure the ablest lawyers, expert witnesses, changes of venue, and delays. If he is at last found guilty, the usual sentence is a pecuniary fine, which means little to a man of means, but much to a poor man.

There is some evidence to show that a person's social class status affects his chances of developing a socially helpful personality. Children in two nursery schools were compared on certain traits of personality.[37] School A was attended almost exclusively by children whose parents were of the professional class, while the children in school B were those of working mothers. The children in the two schools were rated in respect to spontaneity of speech and drawing, persistence, cooperativeness, poise, eating and sleeping habits, self-care, and play initiative. Except for self-care, Group A rated consistently higher than B, especially in spontaneity, initiative, and poise. The superiority of Group B in self-care is easily understood, since with working mothers the children were obliged to look after

Sociological Review, 18: 163–169, April 1953; H. A. Robinson, F. C. Redlich, and J. K. Myers, "Social Structure and Psychiatric Treatment," *American Journal of Orthopsychiatry*, 24: 307–316, April 1954.

[35] Dael Wolfle, *America's Resources of Specialized Talent* (New York: Harper & Brothers, 1954), p. 160.

[36] E. H. Sutherland, *White Collar Crime* (New York: The Dryden Press, 1949).

[37] A. Gesell and E. E. Lord, "Psychological Comparison of Nursery School Children from Homes of Low and High Economic Status," *Journal of Genetic Psychology*, 34: 339–356, September 1927.

62 Relative Expenditures of the Poor and the Rich

In 1950 and 1951, the U.S. Bureau of Labor Statistics interviewed a random sample of 12,500 families in 91 representative cities. The items of expenditure shown here are arrived at by dividing the total expenditure for an item by the number of families in the given income class. (It should be borne in mind while studying this chart that "families" include a number of individuals who are living alone and are classified as the "head of a household.") Of the "families" interviewed, 18.6 per cent had incomes under $2,000 a year, while only 2.4 per cent had annual incomes of $10,000 and over. Families whose income after taxes was less than $1,000 (largely retired and not fully employed persons) spent double their income in 1950, whereas families with incomes over $10,000 were able to save one-third of theirs. (Data from the *Study of Consumer Expenditures, Incomes and Savings* by the University of Pennsylvania in cooperation with the U.S. Bureau of Labor Statistics; Summary

Boys Learn to Beat Pay Phones at Harvard With Pennies, Short Circuits, Baseball Bats

CAMBRIDGE, Mass., May 24 (AP) — For being so smart for eight months, Harvard freshmen in Stoughton Hall won first prize in a private contest today — red-faced telephone company officials took out all their pay phones.

The New England Telephone and Telegraph Company was sure it was being gypped. It claimed it was netting an average of only 2 cents for 5-cent phone calls from the dormitory.

So officials said today they had removed the phones because of "a long and continued abuse of phone facilities in the Yard (Harvard's student campus)."

In September, Stoughton's freshmen revealed, they discovered they could make a call by flicking a penny into the nickel slot and spinning it down the shaft with a key or pencil. And the penny came back, too.

When the company put in "spinproof" phones, the ingenious students bared the wires and shorted them with a coin. One ex-freshman admitted making a free call this way to Boulder City, Nevada. The not-so-skillful merely whacked the phone with a baseball bat and generally got the jackpot through the return slot.

To cap it, last week phone officials found a tally sheet on the wall near the phone.

There was a check mark for every time the phone was swindled.

63 Social Class and Juvenile Delinquency

If boys in a slum area had been guilty of the same misbehavior, what would have happened? How does the social position of the offender affect society's evaluation of his offense? (From an AP dispatch in the *New York Times*, May 25, 1950.)

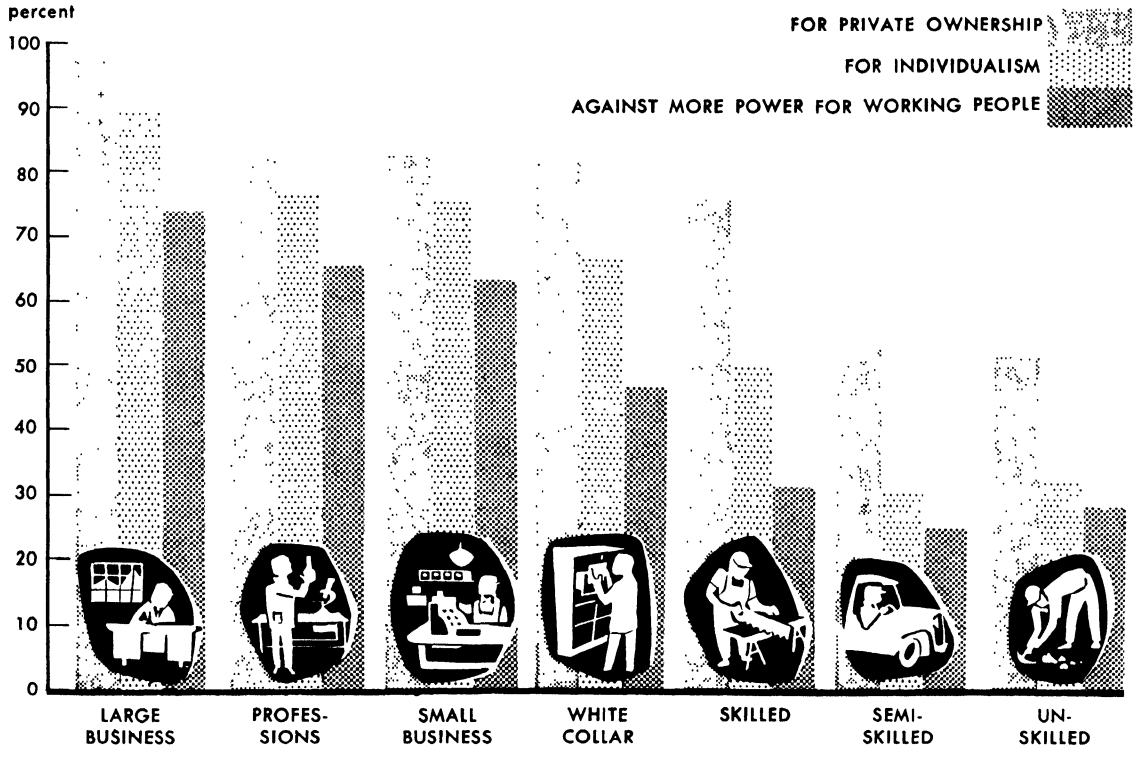
themselves. One limitation of this study is that the testing is in terms of upper-class values, although there is no gainsaying the fact that such traits as those mentioned above are socially helpful.

A further difficulty is that the social class of the judges often affects their judgment, if not their perception. When school children of Morris, Illinois, were asked to rate their classmates in terms of "looks," 43 per cent of the upper-middle and upper classes were rated "good-looking" and only 1 per cent of the lower class. More objective tests showed that these assignments did not correspond with reality.

Social class affects "life-style." Since classes are broad groups between whom there exist barriers to intimate association; since, moreover, classes differ in their opportunities for education, recreation, and the like, they differ also in what they learn, how they behave, and how they regard the world about them. Before the organization of society by classes was emphasized, it was customary for social scientists to give a generalized picture of social life, to describe, for example, "the American character" or "the French way of life." It is now recognized that such a generalized account, although valuable in identifying the universals of the culture, is unrealistic because it ignores the diversity of outlook and behavior of the several social classes. A considerable literature has recently accumulated showing that how people vote, the positions they take on economic and political questions, the churches they affiliate with, and so on, are influenced by their socio-economic status.[38] The lower classes tend predominantly to vote the Democratic ticket in national elections; the upper classes, the Republican ticket. Upper-class Protestants attend mainly the Episcopal, Congregational, and Presbyterian Churches, lower-class Protestants, the Baptist, Lutheran, and Methodist Churches, as shown in Figure 65. There is considerable overlapping on these and other traits, but the correlations with social class are positive.

Studies show significant class differences in family behavior, especially child-rearing

[38] Richard Centers, *The Psychology of Social Classes* (Princeton, N.J.: Princeton University Press, 1949).



64 **Attitude Differences of Urban Occupational Strata**

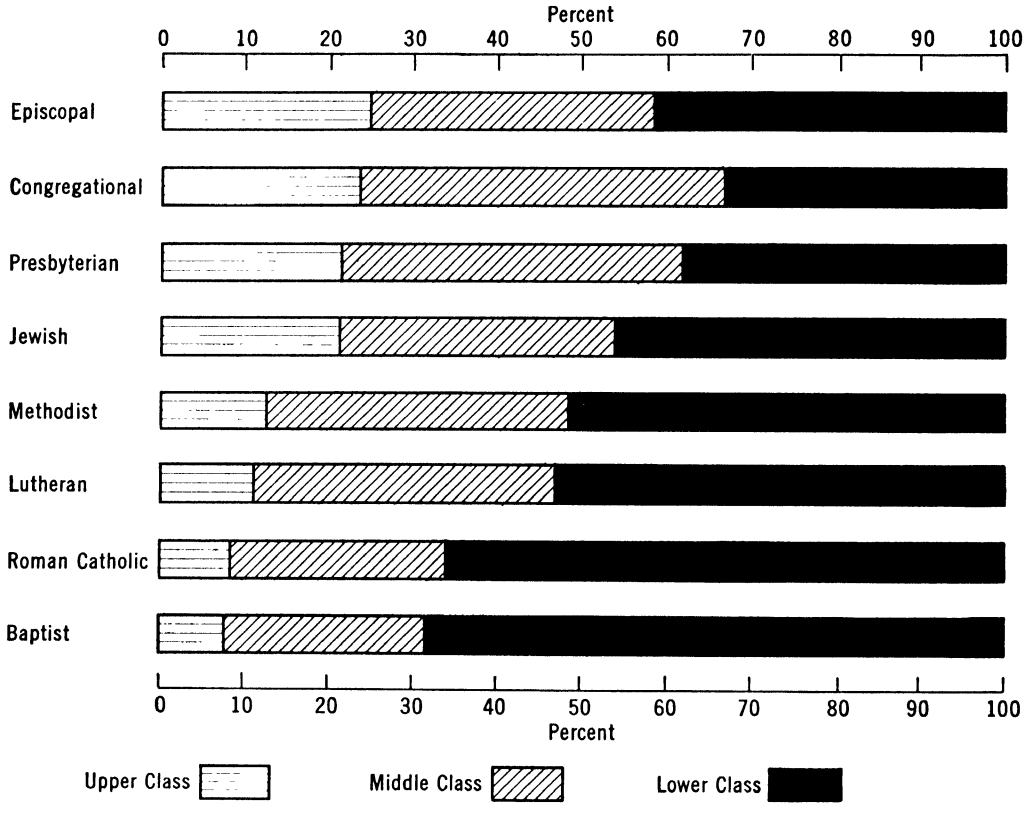
According to these responses to questions on important social issues, based on a representative cross-section of the adult white population, groups that live differently think differently. Their thinking reflects their special interests. (Data from Richard Centers, *Psychology of Social Classes*, Princeton, N.J., Princeton University Press, 1949, p. 63.)

practices.[39] The lower classes are found to be more permissive in feeding and weaning the child, in the development of cleanliness habits, and in the expression of impulses, as in fighting and in sex behavior; whereas the middle class follows more rigorous practices, stricter discipline, and inhibition of impulse. Thus children reared in middle- or upper-class homes are taught to be polite, to develop good manners, to avoid profanity, to associate with class equals, to pay attention to dress and appearance, to get good grades in school, to attend Sunday School regularly, to stress achievement, preferably in a profession or in business, and if they indulge in socially tabooed behavior, to do so privately and under no circumstances to talk about it publicly. Lower-class children learn the opposite in most instances.[40] Kinsey has shown that sexual behavior varies greatly by educational and occupational classes.[41] These are only a few of the differences that have been noted. Indeed, it may be said that there is scarcely an aspect of behavior that is not differentiated according to class. It is highly important to note that social classes constitute subcultures, and that groups which live differently, also act and think differently.

[39] W. Allison Davis and Robert J. Havighurst, *Father of the Man* (Boston: Houghton Mifflin Company, 1947).

[40] A. B. Hollingshead, *Elmtown's Youth* (New York: John Wiley & Sons, Inc., 1949).

[41] Alfred C. Kinsey *et al.*, *Sexual Behavior in the Human Male* (Philadelphia: W. B. Saunders Company, 1948).



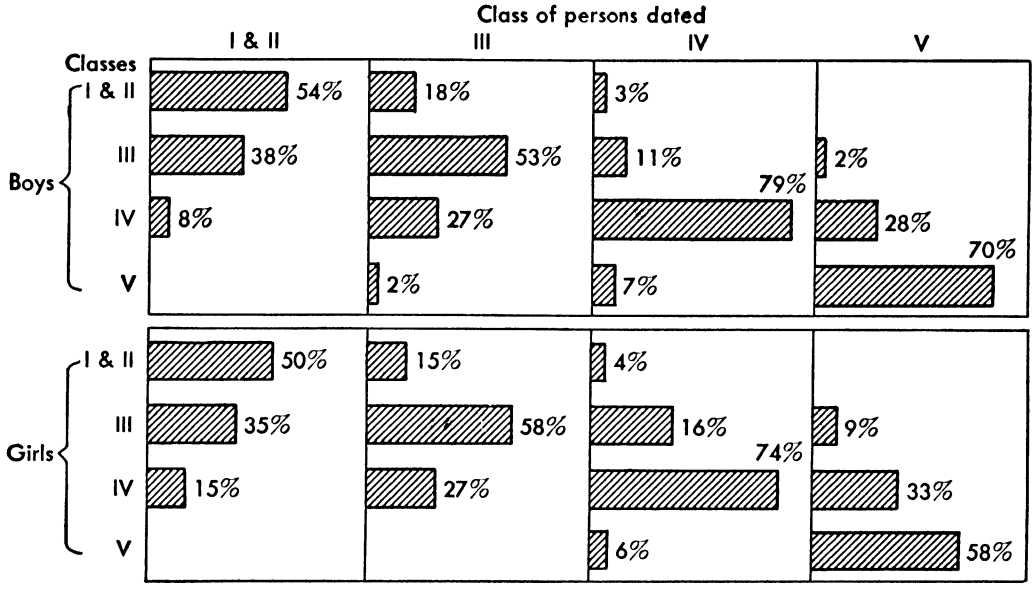
65 Distribution of Religious Groups by "Class"

Although Christianity stresses the brotherhood of man, class differences are reflected in the composition of various church groups. (The data are based on nationwide samples used in election polls in 1946 and 1947, by the Office of Public Opinion Research. Reported in *Information Service*, Federal Council of Churches of Christ in America, Vol. 27, No. 20, Part 2, Table II, May 15, 1948.)

Social rank affects prestige. One of the consequences of social stratification is the amount and kind of attention one receives. The flow of communication is toward the leaders and other persons with influence. They are sought after for advice, reassurance, help. The higher the status of an individual the more likely he is to receive attention from others. How does the leader cope with his load? He communicates mainly with persons on the same or closely related status levels. The more nearly equal the status of two individuals, the more likely they are to communicate with each other.[42]

Toward those in superior positions, those in inferior positions tend to show deference, by yielding to the wishes, opinions, or judgment of the superior or by courteous or obeisant gestures, like the bow or the salute. The effect of superior position, power, and adulation is to give the superior classes an exaggerated notion of their own impor-

[42] John W. Riley, Jr., and Jackson Toby, "Status and Interpersonal Communication in Informal Groups" (Unpublished paper delivered at Berkeley, California, August 31, 1953).



66 Dating Patterns and Social Class

Young people tend to date — and therefore marry — those who belong to the same social class. In 1942 in "Elmtown," a small community of about 6,000, it was reported that 61 per cent of the daters belonged to the same class and 35 per cent to an adjacent class. There were no acknowledged dates between the top two classes and the bottom class, though all attended the same high school. (Reproduced by permission from *Elmtown's Youth* by A. B. Hollingshead, published by John Wiley & Sons, Inc., 1949.)

tance, while the converse leads to an exaggerated self-abasement on the part of the inferior classes. These observations were borne out in an experiment [43] in which three members of ten adolescent cliques — the leader, the middle-ranking, and the lowest-standing member — were asked to estimate their own future performance and that of the other two status occupants on an experimental task. The results showed that the higher a person's status in the group, the more he tended to overestimate his own future performance and the greater was the tendency of the other group members to overrate his performance. The lower the group status of an individual, the less he tended to overestimate his own performance and the less other members tended to overrate his performance, even to the extent of underestimating it.

If we conceive of prestige-ranking as a continuum, it is worth noting that, in our culture at least, the intervals between ranks are often not equal. In the listing of outstanding tennis stars, the National Lawn Tennis Association annually lists the ten best players of the year. The ten next best are not listed. The winner of a tournament gets a loving cup, and the runner-up gets honorable mention. The performance of the third best competitor may be only a shade worse than the others, but he is a forgotten man. When the great temple of vaudeville, New York's Palace Theater, was first opened, there was a weekly wrangle over which star was assigned the No. 1 dressing room. To

[43] O. J. Harvey, "An Experimental Approach to the Study of Status Relations in Informal Groups," *American Sociological Review*, 18: 357–367, August 1953.

prevent rows, the ingenious owner, Martin Beck, would order the No. 1 freshly painted on opening day, rendering it unfit for occupancy — and then he discovered that there was no great jealousy among the actors about who'd get the No. 2 room. If nobody got No. 1, that always ended the rumpus.

Income is a factor in occupational prestige, but it is not the only factor. This observation is borne out by an analysis of the data in Table 6, listing prestige ratings and median wage or salary income of selected occupations in the United States. The correlation (Kendall's tau) between the rankings on these two bases is + .56, which means that about two-thirds of the variation in occupational prestige is accounted for by factors other than income. Additional factors are responsibility for the public welfare and highly specialized training.

Social class and power. Prestige is an important phenomenon; but it should not be stressed to the neglect of power, with which it is highly correlated. Power is significant, because it means influence over the

Table 6 · Prestige Ratings and Median Wage or Salary Income of 24 Selected Occupations

OCCUPATION	PRESTIGE RATING*		MEDIUM WAGE OR SALARY INCOME IN 1949†	
	Score	Rank	Dollars	Rank
College professor	89	1	4168	4
Minister	87	2	2319	20
Chemist	86	3	4004	5
Civil engineer	84	4	4453	2
Artist who paints pictures	83	5	3500	7
Public school teacher	78	6	3353	12
Farm owner & operator	76	7	4598	1
Electrician	73	8.5	3453	8
Trained machinist	73	8.5	3300	13
Bookkeeper	68	10.5	3370	10
Insurance agent	68	10.5	3566	6
Policeman	67	12.5	3164	14
Railroad conductor	67	12.5	4266	3
Mail carrier	66	14	3381	9
Carpenter	65	15	2483	17
Plumber	63	16	3360	11
Garage mechanic	62	17	2879	16
Barber	59	18	2172	21
Streetcar motorman	58	19	3079	15
Lumberjack	53	20	1140	24
Taxi driver	49	21	2482	18
Clothes-presser in laundry	46	22	2476	19
Bartender	44	23.5	2049	22
Janitor	44	23.5	1843	23

*Based on a national cross-section of Americans interviewed by the National Opinion Research Center. The chief factors in job prestige are highly specialized training and responsibility for the public welfare. The occupations are those from a longer list appearing in *Opinion News*, 9: 3-13, September 1, 1947, for which 1949 income data are available.

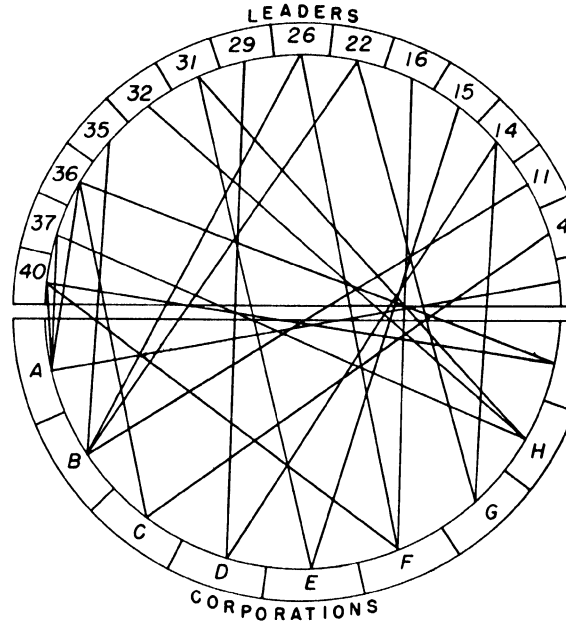
†From Herman P. Miller, *Income of the American People* (New York: John Wiley & Sons, Inc., 1955), Table C-1 Some of the categories are not strictly comparable with those used in the prestige ratings. For instance, artists and art teachers are grouped together; also college presidents, professors, and instructors.

services of others and command over goods. Nor is power, apart from its abuse, to be regarded as an evil, for the exercise of power is a necessary function in social organization. The question we have to consider here is the distribution of power among the social classes. Who has the power to formulate policy, the most significant type of power? A theory advanced by Mosca,[44] for which he has some evidence, is that if one looks closely at any society, whether it be a dictatorship, a monarchy, an oligarchy, or a republic, one always finds that actual power is never in the hands of only one person, nor is it wielded by all the citizens but is rather exercised by a group which is always small compared with the total population. Pareto called such ruling cliques "elites." Mosca's theory is supported by a study [45] of policy-makers in a southern city of 500,000 population to which the name Regional City is given. In this city, 175 names of decision-makers were secured from nominal leaders and of this number, 40 were selected as the principal sources of power. Whichever figure one takes, 40 or 175, the number of elite is a tiny fraction of the total population of half a million.

The policy-making leaders in Regional City, by occupational position, are listed in Table 7. It will be seen that there are 11 directors of large commercial enterprises, 7 bankers, 5 corporation lawyers, 5 industrialists, 1 professional man, 4 government officials, 2 labor leaders, and 5 social leaders. More than half of all the leaders are identified with big business and most of them are presidents of companies or chairmen of boards. None of the city's ministers is among the top policy-making leaders, and none of the doctors. Most of the leaders

[44] Gaetano Mosca, *The Ruling Class* (New York: McGraw-Hill Book Company, Inc., 1939.

[45] Floyd Hunter, *Community Power Structure* (Chapel Hill, N.C.: The University of North Carolina Press, 1953).



67 **Interlocking Directorates of Leaders in Regional City**

The ties between the policy-makers, mainly business men, in this large Southern city are reinforced by residence in the same area, participation in the same clubs, and membership on interlocking boards of directors. (From Floyd Hunter, *Community Power Structure*, Chapel Hill, N.C., The University of North Carolina Press, 1953, p. 77.)

live in close proximity to one another, belong to the same clubs, and serve on interlocking directorates of corporations, as shown in Figure 67. The leaders utilize the machinery of government and other institutions and associations to implement their decisions. The individual who many say is the most powerful single leader attends no formal community board or committee meetings but operates instead through intermediaries.

The picture of Regional City shows that the power is mainly in the hands of upper-class businessmen, although there is some distribution of power by social class over the social classes, since four government officials are influential in decision-making, and two labor leaders, as well as one dentist. But the question of the concentration or

Table 7 · Policy-Making Leaders in Regional City by Occupational Position*

TYPE OF OCCUPATION	NAME OF LEADER	NAME OF ORGANIZATIONAL AFFILIATION	POSITION
BANKING, FINANCE INSURANCE	Hardy	Investment Company of Old State	President
	Mines	Producer's Investments	President
	Schmidt	First Bank	President
	Simpson	Second Bank	Vice-President
	Spade	Growers Bank	President
	Tarbell	Commercial Bank	Executive Vice-President
	Trable	Regional City Life	President
COMMERCIAL	Aiken	Livestock Company	Chairman, Board
	Black	Realty Company of Regional City	President
	Delbert	Allied Utilities	President
	Dunham	Regional Gas Heat Company	General Manager
	Graves	Refrigeration, Incorporated	President
	Parker	Mercantile Company	Executive Manager
	Parks	Paper Box Company	Chairman, Board
	Smith	Cotton Cloth Company	Manager
	C. Stokes	Oil Pipe Line Company	President
	Webster	Regional City Publishing Company	Managing Editor
	Williams	Mercantile Company	Chairman, Board
GOVERNMENT	Barner	City Government	Mayor
	Gordon	City Schools	Superintendent
	Rake	County Schools	Superintendent
	Worth	County Government	Treasurer
LABOR	Gregory	Local Union	President
	Stone	Local Union	President
LEISURE	Fairly	None	Social Leader
	Howe	None	Social Leader
	Mills	None	Social Leader
	Moore	None	Social Leader
	Stevens	None	Social Leader
MANUFACTURE AND INDUSTRY	Farris	Steel Spool Company	Chairman, Board
	Homer	Homer Chemical Company	Chairman, Board
	Spear	Homer Chemical Company	President
	E. Stokes	Stokes Gear Company	Chairman, Board
	Treat	Southern Yarn Company	President
PROFESSIONAL†	Farmer	Law Firm	Attorney
	Gould	Law Firm	Attorney
	Latham	Private Office	Dentist
	Moster	Law Firm	Attorney
	Street	Law Firm	Attorney
	Tidwell	Law Firm	Attorney

*From Floyd Hunter, *Community Power Structure: A Study of Decision Makers* (Chapel Hill, N.C.: University of North Carolina Press, 1953), p. 76.

†Attorneys' affiliations not given. Without exception they are corporation lawyers.

distribution of power has to be seen in terms of place and issue. In a different community, with, say, a large Catholic population, the Cardinal might be highly influential in policy determination (as the clergy in Regional City apparently are not), especially if the policy question under consideration were concerned with a problem like the laws affecting birth control or divorce. If the focus is shifted from the local to the national scene, the balance of power may be different. Big business is thought to have been highly influential in the Republican administration of Dwight Eisenhower, whereas in the New Deal administration of Franklin D. Roosevelt, the big men of labor were more powerful than they were under Eisenhower.

SOCIAL MOBILITY

One of the two big questions about social stratification is the amount of social inequality existing in a society, discussed in earlier paragraphs. The other big question is the degree of opportunity. Opportunity means chances for changing and improving one's social status. Opportunity is related to social mobility, or change in social status, although mobility may be downward as well as upward. Moreover, mobility does not necessarily lessen inequality. This is a point of some importance, since it is commonly and erroneously assumed in our democracy that if we give equal opportunity to everybody, social differences will be lessened. We sometimes see great differences in social achievement and social status among members of the same family because of differences in talents or luck, where the members of the family initially shared the same status and had comparable opportunities.

Social Mobility, Class, and Caste

The child at birth automatically becomes a member of the social class of his parents and ordinarily remains a member of this class throughout his lifetime. Usually he marries someone of the same class, as Figure 66 suggests. All societies, however, provide some opportunity for social mobility, that is, a change of social status, either upward or downward. In some societies it is not uncommon for individuals to move up or down the social ladder because the barriers to mobility are not great. Where this is the case the society is said to have "open" classes. In other societies there is very little shifting from one class to another, and individuals remain throughout their lives in the class into which they chance to be born. Such classes are said to be "closed," and if they are extremely differentiated, they constitute a caste system. "When a class is somewhat strictly hereditary," says Cooley,[46] "we may call it a caste."

Although evidences of caste are to be found in many parts of the world, India is usually cited as the most perfect instance. There we find a social organization "as elaborate in its heaped-up storeys as one of its own pagodas — and vastly more intricate." [47] Below the ranking Brahman or priestly caste are the Kshatriya or warrior caste; the Vaisya or agriculturist and mercantile caste; and the Sudra or artisan and laboring caste. These castes in turn are divided and subdivided into a variety of subcastes, which are hereditary occupational groups. Entirely apart is the group of Outcastes, now called Harijans.

An individual's caste rather definitely fixes his role in life. It determines not only the work he will do, the group into which he will marry, but the very routine of his daily conduct. "There is," writes one who was born a Brahman,[48] "a ritual for every hour

[46] C. H. Cooley, *Social Organization* (New York: Charles Scribner's Sons, 1909, 1929), p. 211.

[47] C. M. Case, *Outlines of Introductory Sociology* (New York: Harcourt, Brace and Company, 1924), p. 516.

[48] D. G. Mukerji, *Caste and Outcaste* (New York: E. P. Dutton & Co., Inc., 1923), p. 6.

of the day in India; the ritual of the peasant and the workman, and the ritual peculiar to the Brahman household like ours. The members of my family, the townspeople, the laborers in the field, the many beggars — each followed an intricate and age-old pattern of life, from sudden sunrise, through fervid noon, to the heavy fall of night and silence."

Relations between caste members are highly regulated. There are definite limitations on the contact of members of different castes, and of caste and outcaste individuals.

The foregoing is an idealized picture, and in reality the caste system of India exhibits great diversity. The light-skinned Indo-Europeans who invaded India from the north do not have a caste system like that of the dark-skinned Dravidians of India. The government has made illegal caste discrimination in education, public services, and state employment. Intercaste marriages were legalized in 1887 and in 1949. The Hindu caste system is a reality, but it is not so rigid as Brahman concepts would lead us to believe.[49]

[49] Edward W. Pohlman, "Evidences of Disparity Between the Hindu Practice of Caste and the Ideal Type," *American Sociological Review,* 16: 375–379, June 1951.

Caste in Ceylon, described and analyzed in a distinguished monograph,[50] has historical connections with the Indian system but differs strikingly from it in a number of important respects. There is no priestly caste; caste organization and government are virtually absent. There is no "untouchable" caste, caste is not legitimatized by specific religious prescription, and the etiquette of deference is moderate. Extremes of class differences are found within the same caste.

A social system, whatever its type of social organization, cannot endure unless it has utility. In the case of societies with a caste system, one advantage is that it minimizes envy or unhappiness. Why fret or strive if one's status is preordained and can be changed only in the next life by exemplary behavior in one's assigned station in this life? Since there is identification of work with caste, and little thought of change, there is more pride in workmanship. An instructive comparison is afforded by waiters in India and the United States. A major social limitation of caste is that it does not utilize fully the talents and capa-

[50] Bryce Ryan, *Caste in Modern Ceylon: The Sinhalese System in Transition* (New Brunswick, N.J.: Rutgers University Press, 1953).



68 India's Outcastes

To avoid "pollution" by contact, a Hindu farmer drops his employees' wages in a leaf into their hands. These "untouchables," who comprise about one-sixth of the population of India, have recently been liberated by law. But it is one thing to pass a law abolishing discrimination, and quite another for customs to change, especially in small places. The city is a potent factor in breaking down caste. (LIFE photo by Margaret Bourke-White, copyright Time, Inc.)

bilities of the population and is therefore a barrier to optimum productivity.

The Relation of Class and Culture

Social classes are rarely found in the lowest primitive barbaric societies such as the Andaman Islanders, the Shoshone, and Tierra del Fuegans. "There is," writes Hobhouse,[51] "always the distinction between its own members and outsiders; there is also a greater or less distinction in the rights enjoyed by the two sexes. In other respects the obligations constituting its ethical life are fairly uniform." Individuals differ in prestige according to personal traits such as skill in hunting or ability to entertain, but there are no distinctions of rank enjoyed by particular groups.[52] There are no rich or poor people because existing property is too limited in amount to create significant differences in wealth.

As material goods increase in volume, however, conditions become more favorable for the creation of classes. Accumulated wealth is not distributed evenly, but accrues to some more than to others. Wealth affords a more permanent basis for social differentiation than personal qualities, for wealth is more easily transmitted from one generation to the next. Wealth is also retained by intermarriage.

While a higher development of material culture is generally favorable to the growth of social classes, the situation is not uniform on any given cultural level. In general it may be said that the American Indians north of the Rio Grande developed societies which were relatively free of class distinctions,[53] whereas in Polynesia, and more particularly in Africa, class lines came to be sharply drawn. Indeed, Africa presents stratified societies which rival those of literate peoples. In Ruanda, Congo, for example, about a million and a half native Bantu peasants are ruled over by a race of mixed Negro and Caucasian cattle breeders, with the Pygmy hunters forming the third and lowest class.

Factors favoring the growth of social classes. Cooley taught that the three principal conditions favoring stratification are: (1) marked differences in the constituent parts of the population; (2) little communication and enlightenment; and (3) a slow rate of social change.[54] The presence of racially dissimilar peoples in the same region suggests invasion, and invasion in turn suggests conquest. Conquest facilitates the formation of castes by providing a servile group in those who are conquered.

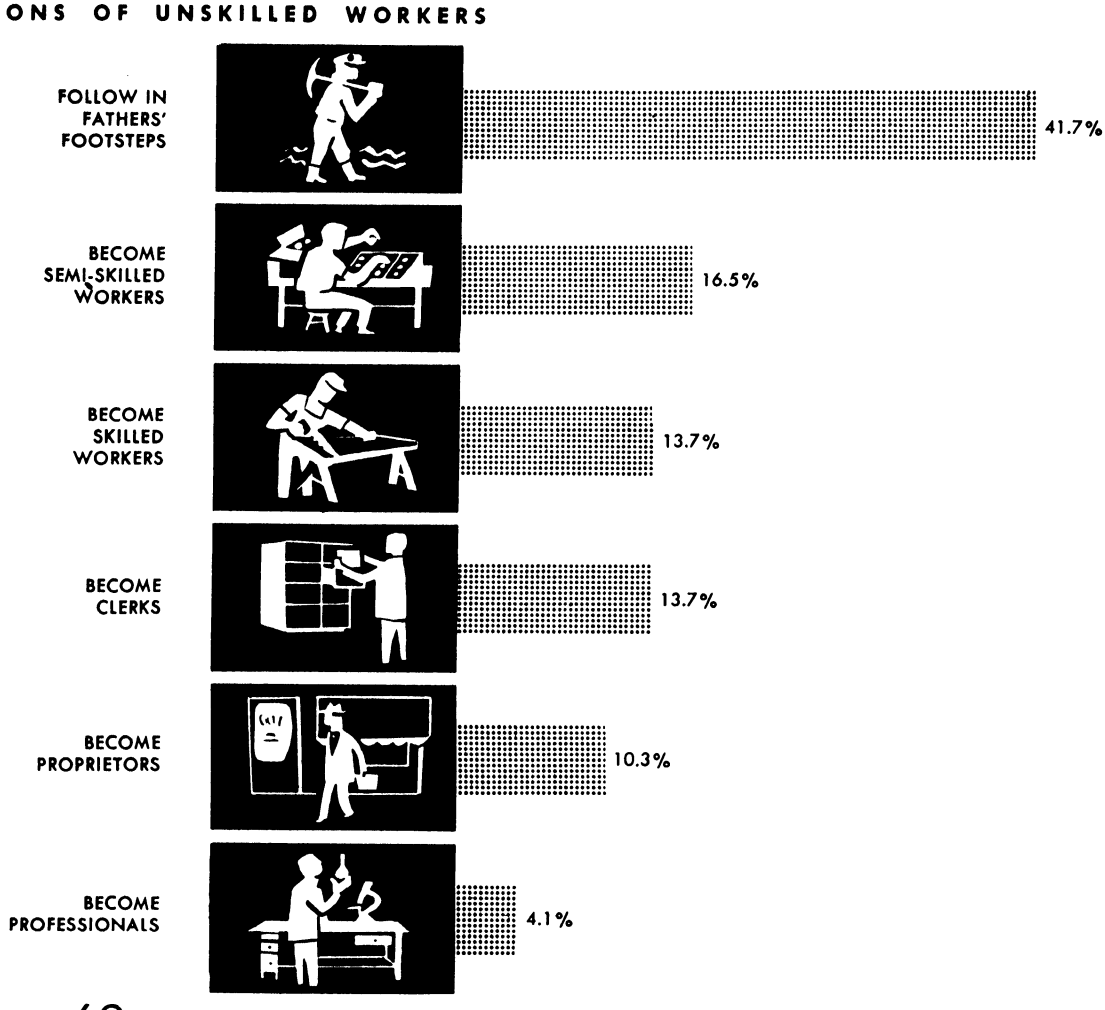
The principal key to social classes is probably to be found in a slow rate of social change, with which is generally associated the factor of a low level of communication and education, mentioned by Cooley. When culture develops to the point where differences in wealth are significant, and conditions remain much the same from generation to generation, we have the bases for the development of social classes. This is the situation in agricultural societies, and it is no accident that the most extreme cases of stratification exist in old farming cultures like those of India and China. When the material culture changes rapidly, when physical mobility increases, and when cities develop, it becomes more difficult to assign fixed social status to the members of the group and to maintain the stratification. It is instructive to observe what has been happening in India under the impact of recent

[51] L. Hobhouse, *Morals in Evolution* (New York: Henry Holt and Co., Inc., 1924), I: 281–283.

[52] Gunnar Landtman, *The Origin of the Inequality of the Social Classes* (Chicago: The University of Chicago Press, 1938), Chapters 1–6.

[53] A noteworthy exception is afforded by the Kwakiutl Indians of the Northwest, whose society consists of noblemen, commoners, and captive slaves.

[54] C. H. Cooley, *op. cit.*, p. 217 ff.



69 **Stability of the Social Classes**

Though an individual in America may move from one class to another, statistics on the occupations of fathers and sons show that for the most part the occupations of the sons are in the same economic class as those of their fathers. (Based on data from P. E. Davidson and H. D. Anderson.)

changes. In the relatively static agricultural society that existed for more than three thousand years, the Untouchables were not permitted to enter the temples or attend the Common Schools or use the public wells. They were so low in the social scale that it was thought that their shadows falling upon food would pollute it. These restrictions first began to break down in the cities, where the anonymity of social life made caste identification more difficult, and where the demands of new occupations clashed with the principle that occupations are determined by caste. Especially in the larger cities, outcastes were permitted to engage in occupations above their degree. And now that the forces of industrialization are bringing further changes, the constitution of the new nation, India, has recently banned Untouchability.

SOCIAL STRATIFICATION IN THE UNITED STATES

The reader naturally has a special interest in the social structure of the United States and wishes to know what it shows in regard to social classes. Despite the democratic shibboleth that "all men are created free and equal," Lloyd Warner has observed that some men are more equal than others. To stress the fact that half of all the presidents of the United States were of humble birth [55] is only to emphasize the dramatic exceptions to a rule and not the rule itself. The rule is that the overwhelming majority of individuals remain in the classes into which they are born.

This conclusion is supported by an abundance of evidence on occupational succession in families. A sample study [56] of 1242 persons comprising 7 per cent of the working population of San Jose, California, in 1930, showed that while there have been some shifts in the socio-economic organization of the community in the last few generations, the social-class situation has remained much the same. That is, there has been some shifting of jobs without shifting of class. The older occupational set-up of the community consisted largely of proprietors, skilled workers, and unskilled workers. Lately there has been a heavy flow of workers into professional positions and into the expanding clerical and semi-skilled occupations. Figure 69, based on the findings of Davidson and Anderson, shows that of the sons of unskilled workers, 41.7 per cent followed in their fathers' footsteps; 16.5 per cent became semi-skilled workers; 13.7 per cent skilled workers, 13.7 per cent clerks; 10.3 per cent proprietors; and 4.1 per cent professional people. While recognizing here a considerable degree of mobility, we observe that most of the sons of unskilled workers remained in their fathers' social class.

The mobility for the country as a whole is doubtless much less than it is in this developing, progressive far-western community. After reviewing numerous studies, Sorokin [57] concludes that, even though there is considerable mobility in America, most children continue their fathers' work or enter closely allied fields. An even larger number remain on the same occupational level. That is, there is much more mobility between occupations on the same social level than between those of different levels. "Only a relatively small part (of the children of common laborers) succeed in entering the higher professional occupations, [or in] becoming managers and owners of big business enterprise."

The American Caste System

According to some observers, American society is organized not only along class lines but along caste lines as well, particularly in the South. The rule is that Negroes and whites must not associate on the basis of equality, especially in relations of intimacy.[58] Since the most intimate relationship of all is marriage, the strongest taboos are leveled by the laws of many states and by the mores of all against intermarriage of Negroes and whites. The Southern white boy is taught not to say ma'am to a Negro woman, not to tip his hat to her, and not to give her the right of way on the sidewalk. Separate seats are assigned Negroes in streetcars, separate coaches on trains, separate waiting rooms at railroad stations. Theaters, restaurants, hotels, and other com-

[55] P. Sorokin, "The Monarchs and the Rulers," *Social Forces*, 4: 22–35, September 1925; 4: 523–533, March 1926.

[56] Percy E. Davidson and H. Dewey Anderson, *Occupational Mobility in an American Community* (Stanford, Calif.: Stanford University Press, 1937).

[57] P. Sorokin, *Social Mobility* (New York: Harper & Brothers, 1927).

[58] John Dollard, *Caste and Class in a Southern Town* (New Haven, Conn.: Yale University Press, 1937), p. 96.

mercial establishments often exclude Negroes or provide separate services for them. The facilities provided for Negroes are usually much less adequate than those available to whites.

There are those who take issue with the view that the relations of whites and Negroes in the United States constitute a caste system.[59] They point to the statutes in many states permitting intermarriage and to the lack of a specific association of race and occupation. The Supreme Court has outlawed segregation in education. Brahmanic-Indian society, it is alleged, represents the only authentic caste system and is not to be confused with Negro-white relations, which are race and not caste relations.

Whether one believes that Negro-white relations in the United States constitute a caste system may depend on how caste is defined. If caste is identified with the East Indian social structure, then all systems that are less rigid than this one may be considered not to be caste systems. On the other hand, social systems may be distributed on a continuum of social mobility ranging all the way from extreme social immobility to extreme mobility. Actually the polar type of extreme immobility is an ideal type which existing social orders only approximate. The East Indian society with its names for castes, its myth of a common origin (namely, that all Brahmans trace their origin to the first Brahman who is said to have sprung from the mouth of Brahma), its endogamous subcastes, and its caste sanctions, probably comes closest to the extreme; but the phenomenon of stratification is one of degree.

Moreover, it may be helpful to view the situation from the standpoint of social change. The status system of Negroes in the United States was much more rigorous under slavery, and more nearly approximated that of India. During the past few centuries, cultural changes have been much more extensive in the United States, affecting the relations of the races. But even in India the caste system has not been unaffected by social change. In addition to the changes in the status of the Untouchables already mentioned, it may be noted that the upper-caste observance of teachings regarding commensality or intra-dining has weakened, as has the association of caste and occupation. Ideally, Brahmans should be priests, but according to the Census of 1931 only 166 out of 1000 earners of the Brahman caste were engaged in the traditional occupation of priesthood.[60]

In the United States today, as the result of the emancipation of the Negroes, of industrialization, and of the migration to the cities, a wide range of occupations has been opened up to Negroes. The result is class mobility within the Negro caste, so that at present some Negroes are on a higher class level than some whites. Warner[61] illustrates the situation by means of the diagram in Figure 70.

American Social Classes

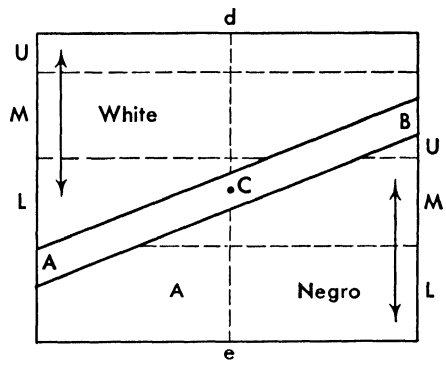
It is customary to consider the social structure of the United States, like that of most other modern industrial nations, as made up of three broad social classes — the lower, the middle, and the upper. An analysis of the class structure of Newburyport, Massachusetts ("Yankee City"), a town of 17,000, assigned 3 per cent of the population to the upper class, 38 per cent to the middle class, and 58 per cent to the lower class, with the status of 1 per cent unknown.[62]

[59] Oliver C. Cox, *Caste, Class, and Race* (New York: Doubleday & Co., Inc., 1948).

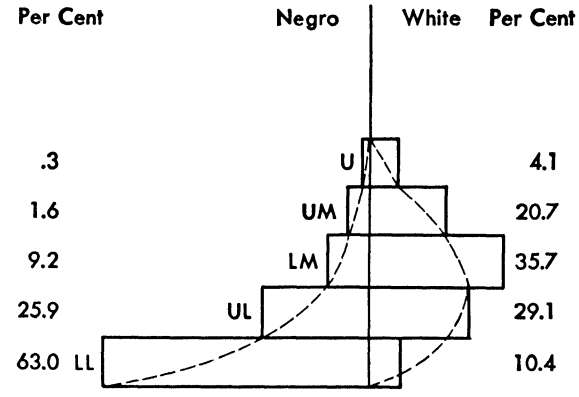
[60] Jyotirmoyee Sarma, *The Hindu System of Caste in the Province of Bengal in India* (Master's thesis, University of Chicago Libraries, 1942).

[61] W. Lloyd Warner, "American Class and Caste," *American Journal of Sociology*, 42: 234–237, September 1936.

[62] W. Lloyd Warner and Paul S. Lunt, *The Social Life of a Modern Community* (New Haven, Conn.: Yale University Press, 1941).



U—Upper Class
M—Middle Class
L—Lower Class
AB—Caste Line
de—Ultimate Position of Caste Line
C—Axis of Caste Line



U—Upper Class
UM—Upper Middle Class
LM—Lower Middle Class
UL—Upper Lower Class
LL—Lower Lower Class

70 Caste/Class Structures of the United States

The figure on the left is Warner's schematic representation. The diagonal lines separate the Negro caste from the white caste, and the broken lines in each segment separate the classes in each caste from one another. The double-headed arrows show that movement does occur up and down the class ladders. However, there is no movement or marriage across caste lines. Since slavery, the caste line has swung on its axis (C), so that the top Negro group is higher in class than the lowest white group. (From W. Lloyd Warner, "American Class and Caste," *American Journal of Sociology*, 42:234–37, September 1936.)

The right-hand figure shows the reported caste/class composition of "Georgia Town," a market center and county seat in southeast Georgia, with a population of about 5,000 with 30 per cent of these Negro. A comparison of the class structure of Georgia Town with an all-Negro community in Oklahoma (not shown here) suggests that in a bi-racial community there is likely to be a larger proportion of lower-class Negroes than in a racially homogeneous community. (From Mozell C. Hill and Bevode C. McCall, "Social Stratification in 'Georgia Town,'" *American Sociological Review*, 15: 721–730, December 1950.)

Each of the classes was further divided into upper and lower, making six strata in all. These results have been criticized as not being based on objective criteria and as not having general validity, that is, as not being applicable to communities of different size such as, say, New York City and Grinnell, Iowa. In "Plainville," [63] a Missouri agricultural community with a small-town center, about half the population referred to itself as "middle class," about 30 per cent was described as "good lower class," and the remaining 20 per cent as "the lower element." The more prosperous and influential citizens of the community were occasionally referred to as "the upper crust," but since they did not differ from the middle class in behavior or in professed social claims, the investigator concluded there was no upper class in the community. Moreover, it will be noted that the bottom group is the smallest, so that Plainville does not conform to the traditional conception of the social structure as resembling a truncated pyramid. Likewise in a town of less than 1,000 population in eastern New York, it is said that

[63] James West, *Plainville, U.S.A.* (New York: Columbia University Press, 1945).

there are only two classes and that the upper is nearly twice as big as the lower.[64] Earlier we saw that other studies of American communities report still different class distribution and in some instances uncertainty concerning the class composition.

The composition of American social classes. There is most agreement regarding the composition of the classes at the two extremes of the social scale, the upper and lower classes. The lower classes are propertyless workers such as the unskilled, the semi-skilled, the farm laborers, and those on relief. The upper classes, such as large merchants, manufacturers, bankers, and railroad men, are the owners and managers of the capital and the important means of production. Some lawyers, doctors, and other professional persons are also included. Less clear is the composition of the middle class.[65] Independent small producers, small owners of property or of their own means of livelihood, generally identify themselves with this class. The position of white-collar office workers is equivocal, although they are generally regarded as middle class, despite the fact that their income is often exceeded by that of wage-earners.[66] Most salaried professional people are placed in the middle class as are most salaried business employees.

Differences between upper and lower class. It is instructive to compare the two extremes of the social scale as observed in Yankee City in the 1930's,[67] that is, the upper-upper and lower-lower classes. The lower class had more males of all ages, largely because it included so many immigrants who did not bring their wives or other female relatives with them. The upper class showed a surplus of women, mainly unmarried females who remained in the old family homes after their parents had died and their brothers had married and moved elsewhere. Since lineage is emphasized in the upper class, the group was highly endogamous and there was found to be no taboo on marriage between first cousins. Because it was necessary to marry within the group and because many of the males had left the community, many upper-class females chose to remain single rather than marry beneath themselves socially. The lower-class youth married earlier, the median age being 23.3 years as compared with 27.9 for the upper class and 24.4 for all classes. That the upper class tends to have the smallest families and the lowest class the largest families is well known.

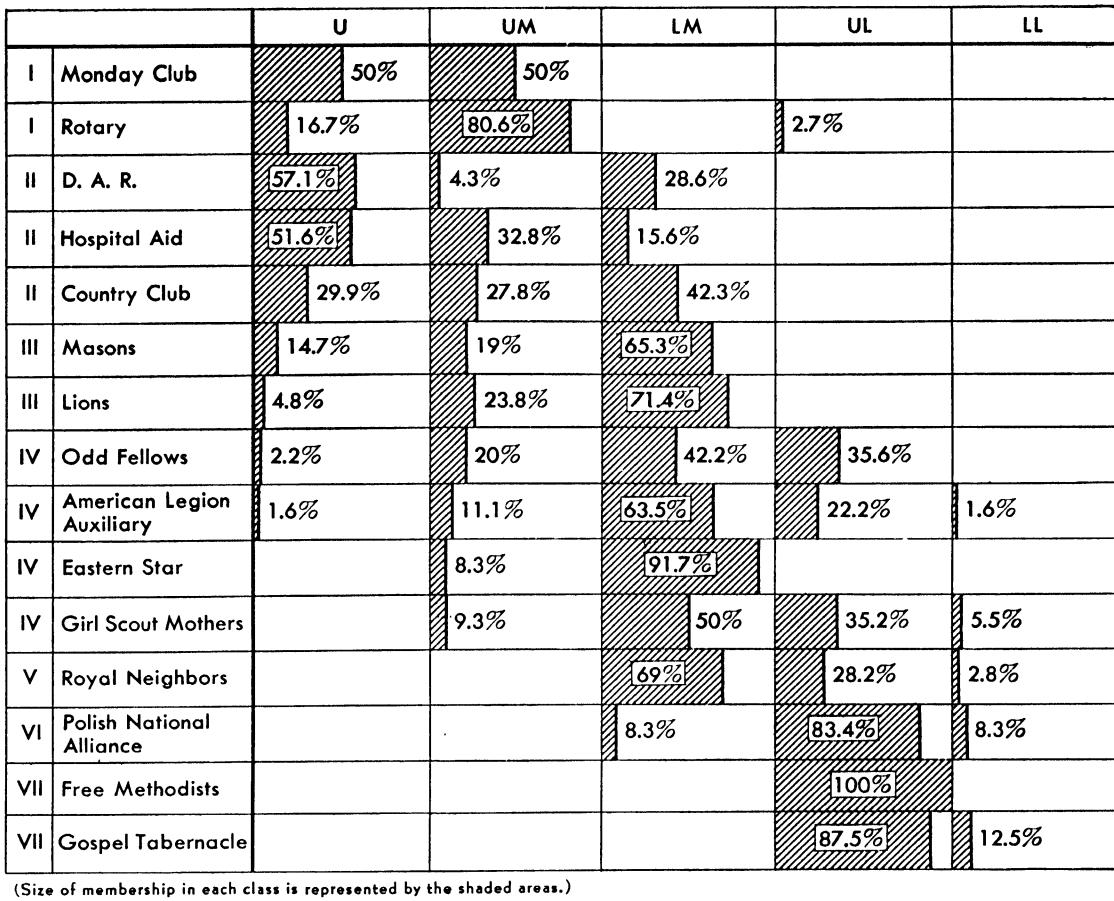
As to economic characteristics, the average family income of the upper-upper class was about $6400; and for the lower-lower, about $880. These figures are for the depression year, 1933, and in dollars of more purchasing power than in 1950. None of the upper-class families was on relief, although some were without funds, whereas one in three lower-class families was receiving governmental aid. Expenditures for food, shelter, and clothing required about three-fourths of the total budget of the lower-class families, which means that most of the income of this class is spent for necessities; whereas one-third of the income of the upper class was spent for these three items, permitting larger expenditures for travel, education, charity, and gifts. Particularly interesting is the expense for house operation, which was the largest item of expense for the upper class. To the upper class the home is perhaps the most important symbol of status, reflecting cultural differences in family life and the unequal dis-

[64] C. Hicks, *Small Town* (New York: The Macmillan Company, 1946).

[65] Alfred Meusel, "The Middle Class," *Encyclopedia of the Social Sciences* (New York: The Macmillan Company, 1937), 10: 407–415.

[66] Mills thinks the lower-middle class, preoccupied with status and the unrealized hope of moving up, experiences a "status panic." C. Wright Mills, *White Collar* (New York: Oxford University Press, 1951).

[67] Warner and Lunt, *op. cit.*



(Size of membership in each class is represented by the shaded areas.)

71 Preliminary Class Distribution of Selected Associations and Churches

The class status of an individual is indicated only in part and within limits by the associations to which he belongs, since associations and churches have differential status in the community, as shown in the above chart of the tentative class distribution of several organizations in a Middle Western city. In other communities, some of these organizations may have a different social rating. (From W. Lloyd Warner, Marchia Meeker, and Kenneth Eells, *Social Class in America,* Chicago, Science Research Associates, 1949, p. 95.)

tribution of wealth and possessions among the classes. The upper-class homes of Yankee City ranged from eight to twenty rooms, providing separate space for different members and for different functions. Children and servants usually occupy the top floor, adults and other members of the family the second floor, while the family rooms are usually on the ground floor. The living room, usually with its fireplace symbolizing family unity, and the dining room are the centers of intimate family relationships. Preparation and serving of meals involve ritual relations of the family to the servants and traditional and aesthetic objects, as well as expressing the family communion around the table. Whereas the home is an important locus for the upper class, poor housing and crowding may be important reasons for the observed predominance of "street life" among the lower class.[68]

[68] W. Halbwachs, *La Classe Ouvrière et les Niveaux de Vie* (Paris: Félix Alcan, 1913).







72 **Family Lineage and Social Class**

Jean Middlebrooks (above), a student at Wesleyan College, Macon, Georgia, points out the signature of her great-great-grandfather, Bishop George F. Pierce (upper left), first president of the college, to another Wesleyan student, Celeste Parker, great-great-granddaughter of Catherine Brewer (lower left), first graduate of the college in 1840. The pride of a family in its lineage is often sustained by close affiliation with elite institutions such as colleges. Family lineage is an important basis of ascribed social status. (Material supplied by Richard Klemer.)

As to social life, while 41 per cent of the total Yankee City population belonged to associations, membership in associations was true of 72 per cent of the upper and 22 per cent of the lower classes. Less than one-third of the upper class belonged to only one association, but three-fourths of the lower class were so limited. About one in 14 of the upper class belonged to 10 or more associations, but this was not true of any member of the lower class — an understandable difference since membership in associations usually costs money. Other studies show that low-income groups have more informal, unpaid participation, like visiting relatives and neighbors.[69]

The upper class supported the Presbyterian, Episcopal, and Unitarian Churches, and limited lower-class membership in upper-class congregations by maintaining branches in the lower prestige areas of the town. The lower class mainly attended the Catholic and Methodist Churches.

Most of the members of the upper class sent their children to private schools in Boston or to boarding school rather than to the local high school, particularly for the last two years of high school. Those who did attend the high school usually took the

[69] Floyd Dotson, "Patterns of Voluntary Association Among Working Class Families," *American Sociological Review*, 16: 687–693, October 1951.

course which prepared them for college. Yale, Harvard, and the Massachusetts Institute of Technology were the colleges usually attended, while the lower classes, if they went to college, often attended a Y.M.C.A. College which alternates school attendance and outside work. Most of the lower-class youth took the commercial rather than the college course.

The reading habits of the classes differed. Though there was a large library, it was used mainly by the middle class. The upper class bought its own books, while the lower class did not read many books. The upper class preferred scientific, historical, and biographic books, while the lower class read more adventure stories. Detective stories had great appeal to both classes. Among the magazines preferred by the upper class were *The Reader's Digest, Time Magazine, Atlantic Monthly, Harper's, New Yorker,* and *Fortune;* the lower class preferred *Liberty, Woman's Home Companion, True Story,* and *Cosmopolitan.* Lower-class people went more often to the movies.

Life of the upper class. An account of a section of the upper class of Chicago in the late 1920's has been given us by Zorbaugh.[70] The so-called "upper 400" are those who have arrived socially. They form a self-conscious group and are recognized leaders of "society," which consists of about 6000 persons whose names appear in the Social Register of Chicago. To be listed "one must not be 'employed,' must not make application, and must be above reproach." This class has newspapers of its own, the *Clubfellow* and *Town Topics,* and of course receives special space in the daily papers. There are certain clubs in which membership is almost obligatory, since a man is placed by clubs. The best clubs are the Casino, and the Saddle and Cycle; but Onwentsia, Shore Acres, the Racquet, and Indian Hill will do. The elite live apart not only socially but geographically as well. The leaders live along the "Gold Coast," which extends from East Chestnut Street to Lincoln Park, and west to North State Parkway, a strip about a mile in length and two blocks deep. If one lives at a hotel, it should be the Lake Shore Drive Hotel or the Ambassador. Summer colonies are located at Lake Forest, Hubbard Woods, and a number of other places. Life revolves around the social season — a round of activities that is the pageant of "society," including balls, assemblies, and parties, lasting about four months — following which there is an exodus to warmer climes. There may be a return to the city in time for the Easter holidays, but with the approach of warmer weather another exodus to the summer colonies occurs.

A typical calendar of a society woman is given as follows:

> Hairdresser — once or twice a week.
> Manicure — once or twice a week.
> Massage — once a week.
> Dressmaker.
> Shopping — every few days.
> Ballet class, to preserve the figure — once a week.
> French class, group of six, at a friend's home — once a week.
> Lectures — Bridges' series of six (time to attend only three) at the Playhouse, and the Fortnightly Club.
> Club meetings — two clubs, each meeting monthly, at the Fortnightly, non-uplift; papers by members, and luncheon, or tea.[71]

The bases of upper-class position. Money and family are the two keys to the doors of "society." Those with the highest social-class status are generally those who have been wealthy the longest, allowing the family reputation to be firmly established.

[70] Harvey W. Zorbaugh, *The Gold Coast and the Slum* (Chicago: The University of Chicago Press, 1929).

[71] *Ibid.,* p. 55.

The significance of wealth, as the German sociologist Georg Simmel[72] has so ably shown, lies in the freedom it affords, freedom from drudgery and the routine of everyday work, thus releasing time and energy for the cultivation of fine taste, good manners, and the like. The *nouveaux riches* have the wealth but not the family reputation, hence meet with some difficulty in securing recognition from the elite. It may take more than a single generation to acquire the "good breeding" and to obtain social acceptance on the higher levels. But if the family retains the wealth over a number of generations the breeding is likely to come and so, too, the social-class status.

How those who have been wealthy a relatively short time play "the social game" in their bid for status and prestige is described by Zorbaugh in the study already cited. "The social game" calls for a great deal of publicity, display, and lavish spending, for unless there is "conspicuous consumption," the fact that a family possesses wealth may not be recognized. There are certain events of the season to which the best people are invited, and an invitation to one of these occasions is sometimes managed by the socially aspiring through such means as the contribution of a substantial sum to a charity in which the social leader is much interested. Although there is generally a lag between the acquisition of wealth and the attainment of social recognition, given time, the lag is likely to be caught up.

Since class membership, once obtained, is socially inherited, upper-class position is often retained by families that once had wealth but have it no more. Upper-class status does not require the continual underpinning of economic pre-eminence. For example, in the South, as Dollard[73] shows, a person may have little money, but still be one of the "aristocracy." If a Southerner, reading through a history book, stops now and then to say, "Oh, yes, that is Governor So-and-so, he was my grandmother's brother," or "General Blank married a second cousin of my mother; she was one of the South Carolina Blanks, you know," he is an upper-class person, even if he is not rich. Nowadays much of the claim to position is based on such connections with other leading families of the past rather than on current achievement. In India, the exigencies of life have brought about a similar situation, in that the Brahman caste still rates highest in social status, but has been put in seventh place in a national rating according to solvency and credit.[74] These lags raise the interesting question of how long discrepancies between wealth and class can persist.

American Versus European Social Classes

While America is clearly not without social classes, it must at once be added that they differ from those found abroad. Albert Guerard, in his autobiography, remarked that it was a relief to come to the United States without its military, its aristocracy, and its clergy; these groups are present in America, but they do not exist as social classes the way they do in Europe.

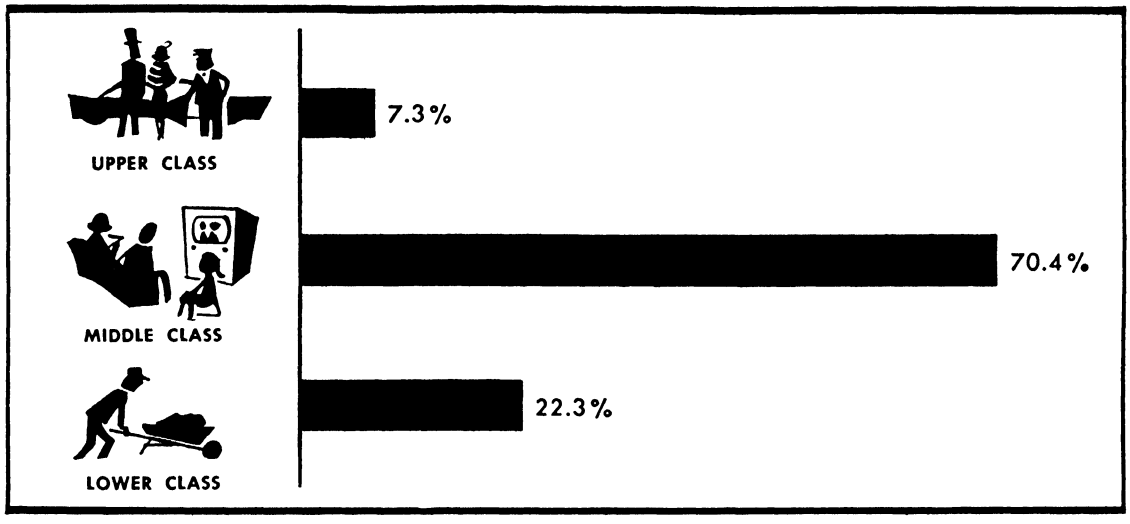
In England the chances of going to college were in the early 1950's about one-tenth as great as in the United States.[75] In America, class lines are not drawn so sharply as in England and Europe, and there is considerably more vertical mobility, or movement up and down the social ladder. Especially significant has been the influence of the fron-

[72] N. Spykman, *The Social Theory of Georg Simmel* (Chicago: The University of Chicago Press, 1925).

[73] John Dollard, *op. cit.*, p. 80.

[74] S. S. Nehru, *Caste and Credit in the Rural Area* (New York: Longmans, Green & Co., Inc., 1932), p. 15.

[75] Estimated from data in *Statistical Yearbook* (United Nations, 1954).



73 The United States Says It Is Middle Class

In a survey conducted by *Fortune* about two decades ago, 70.4 per cent of the people replying said they thought they belonged to the middle class. This is in striking contrast to the fact that about 50 per cent of the population of the United States had an income of less than $1,000. The semi-skilled and unskilled workers alone made up 46 per cent of the population. The addition of another 14 per cent coming from the ranks of the skilled workers, farm tenants, and low-salaried groups, made 60 per cent. As to the upper class, in 1935 only 2.5 per cent of the population received an income of over $5,000. Since then, considerable up-grading has occurred, and there is now closer correspondence between assertion and reality.

tier,[76] where "the rifle and the axe made all men equally tall." With a great continent available for development, dissatisfied and dispossessed individuals could go west and start life anew. Likewise the great waves of immigration into the United States favored social mobility. These conditions helped to foster democratic traditions. The Constitution of the United States specifically states that the government may grant no titles to its citizens, nor may officials receive honors from foreign powers without the approval of Congress. Whereas the aristocratic tradition of England is reflected in the advertising slogan: "By appointment to His Majesty," the democratic spirit of America is heralded by the slogan: "Ask the man who owns one." Because of our tradition of democracy, we are reluctant to admit the reality of classes in America. Rather we call them minority groups, although they may not always be minorities.

American social conditions have given to the masses a psychology unlike that possessed by the English people. The son of an English laborer has considerably more expectation of following in his father's footsteps than does the son of an American worker. The latter is more likely to have his mind set on acquiring a little capital and becoming an entrepreneur. The concern of the American worker has been not so much to identify himself with his class as to rise above it. This ambition is suggested by the results of polls, like that pictured in Figure 73, showing that most Americans if asked to state whether they are upper, middle, or lower class, report themselves as belonging to the middle class. When given a fourfold choice of upper, middle, working, or lower

[76] F. J. Turner, *The Frontier in American History* (New York: Henry Holt and Co., Inc., 1921).

class, 51 per cent identified themselves with the working class.[77] In the minds of many persons, a stigma attaches to the phrase "lower class," which is seen as a group that is not just poor but deservedly poor because it is disreputable and irresponsible.

In his celebrated study of American life and government, Lord Bryce[78] noted that American classes differed from those of his own country. "Their specific characters, as a naturalist would say, are less marked even in typical individuals than would be the case in Europe, and are in many individuals scarcely recognizable." He comments on the fact that the wives and daughters of workingmen dress with so much taste that "on Sunday . . . you would take them for persons in easy circumstances." Indeed, the workingmen themselves can often not be distinguished by their dress from persons in better positions. Bryce was also impressed by the fact that the American shopkeeper "has not the obsequiousness of his European congener, and is far from fancying that retail trade has anything degrading about it." As for the American upper class, Bryce noted that it had no cultural ties comparable to those which bind the English aristocracy together. There is in the United States no one class whose special business it is to form and lead opinion, and much less is there any governing class, such as is found in England. The upper class in America is not unified by common ideals and standards of behavior. The railway fortunes of the Harrimans and the Vanderbilts have been succeeded by the automobile fortunes of the Fords and Chryslers, and the movie millions of the Goldwyns and Loews. Such individuals have no cultural ties comparable with those which bind the English aristocracy together.

[77] Centers, *The Psychology of Social Classes*, p. 77. Based on a national cross-section of white males in July 1945.

[78] James Bryce, *The American Commonwealth* (New York: The Macmillan Company, ed. 1921), p. 293 ff.

Are class lines becoming tighter? In what direction are social classes tending in the United States? Is mobility decreasing or increasing? Gone are many of the social conditions that gave us open classes. There are now no new geographical frontiers; immigration has been checked; and in general a larger amount of capital is required to establish a new business. Mobility is reported to be largely within manual and nonmanual occupations rather than between them.[79] The ratio of actual to expected variations in the social origins of occupational groups over time has not changed significantly.[80] An analysis of the social origins and careers of some 8,000 major business executives of the largest firms in the United States in 1952, when compared with findings made twenty-five years earlier by Taussig and Joslyn (*American Business Leaders*) showed that the sons of laborers and white-collar workers, while underrepresented in big business in both periods, increased their representation, whereas there was a marked de-

[79] Seymour M. Lipset and Reinhard Bendix, "Social Mobility and Occupational Career Patterns," *American Journal of Sociology*, 58: 494–504, March 1952.

[80] Natalie Rogoff, *Recent Trends in Occupational Mobility* (Glencoe, Ill.: The Free Press, 1953).

Table 8 · Changes in Occupational Mobility in American Business Leadership Between 1928 and 1952*

Occupation	1928 Ratio†	1952 Ratio†
Laborer	0.24	0.32
White-collar worker	0.71	0.80
Professional man	4.33	3.50
Businessman	9.67	4.73
Farmer	0.32	0.33

*From W. Lloyd Warner and James C. Abegglen, *Occupational Mobility in American Business and Industry, 1928–1952*, p. 48. Copyright 1955, University of Minnesota.

†Proportional representation = 1.00. This means that if the number of business leaders contributed by an occupational group were proportional to the population of that occupation, the ratio would be 1.

PRESIDENTS OF BELL SYSTEM COMPANIES AND THEIR FIRST JOBS

Name	Company	Date	Place of Start	First Pay	First Job
Cleo F. Craig	Amer. Tel. & Tel. Co.	1913	St. Louis	$15 a week	Equipment Man
Allerton F. Brooks	Southern New England Tel. Co.	1911	New Haven, Conn.	$12 a week	Engineer's Assistant
Edwin M. Clark	Southwestern Bell Tel. Co.	1923	New York	$30 a week	Installer
Sanford B. Cousins	Northwestern Bell Tel. Co.	1920	New York	$30 a week	Traffic Student
Wilfred D. Gillen	Bell Tel. Co. of Penna.	1923	Philadelphia	$27 a week	Clerk
John A. Greene	Ohio Bell Tel. Co.	1914	Chicago	$50 a month	Contract Clerk
Harry S. Hanna	Indiana Bell Tel. Co.	1922	Cleveland	$57 a week	Engineer
Joe E. Harrell	New England Tel. & Tel. Co.	1913	Atlanta	$14 a week	Clerk
William A. Hughes	New Jersey Bell Tel. Co.	1917	Kansas City, Mo.	$60 a month	Groundman
William V. Kahler	Illinois Bell Tel. Co.	1922	New York	$25 a week	Engineering Assistant
Frederick R. Kappel	Western Electric Co.	1924	Minneapolis	$25 a week	Groundman
Dr. Mervin J. Kelly	Bell Telephone Laboratories	1918	New York	$40 a week	Physicist
Walter K. Koch	Mountain States Tel. & Tel. Co.	1923	Denver	$100 a month	Traffic Student
Keith S. McHugh	New York Tel. Co.	1919	New York	$35 a week	Clerk
James B. Morrison	Chesapeake & Potomac Tel. Companies	1925	Washington, D. C.	$27 a week	Engineering Assistant
Clifton W. Phalen	Michigan Bell Tel. Co.	1928	Syracuse, N. Y.	$30 a week	Lineman
Mark R. Sullivan	Pacific Tel. & Tel. Co.	1912	San Francisco	$50 a month	Clerk
Fred J. Turner	Southern Bell Tel. & Tel. Co.	1907	Atlanta	$18 a month	Clerk
Charles E. Wampler	Wisconsin Telephone Co.	1929	Chicago	$130 a month	Traffic Student

74 **Social Mobility**

The presidents of the companies in the Bell Telephone System all started in the ranks. Seventeen years ago the Bell System first published an advertisement like this one. All of the names were different. Although the starting position of these men does not tell us what income class they came from, the Warner-Abegglen study reported in the text shows major business executives in the United States increasingly recruited from the laboring and white-collar classes. The great route to mobility is tax-supported, universal public education. (With permission of the Bell Telephone System.)

cline in the business leadership of sons of businessmen.[81] These findings are summarized in Table 8.

The most comprehensive study of social mobility to date, based on an approximation to a random sample of 3,497 adult civilians eighteen years old and over in England, Scotland, and Wales, classified the subjects by decade of birth from 1890 to 1930. The data show no significant change over time in the proportion of subjects with the same social status as their fathers, which for each decade was close to the percentage for the whole sample, namely, 35.1 per cent.

A contrary trend in social classes in the United States is the decrease in those classes

[81] W. Lloyd Warner and James C. Abegglen, *Occupational Mobility in American Business and Industry: 1928–1952* (Minneapolis: University of Minnesota Press, 1955).

with lower social status and an increase in those with higher social status. If we may call large occupational groups social classes, then the class lowest in status is that of unskilled labor, as shown in Figure 75. The occupational groups with the highest rank are the professional persons and the proprietors. The unskilled workers were a much smaller proportion of those at work in 1950 than in earlier decades, whereas the high-ranked occupational groups existed in larger proportions in 1950 than before. The white-collar group, which is usually ranked in social status above skilled labor, has increased greatly.[82]

The reasons for these shifts in the numbers of the social classes are probably economic and technological. Machines, such as steam shovels, have taken away some of the work of the unskilled; some work of the skilled has also been taken, as, for instance, that usurped by the bottle-making machines. The machine tenders, whom we call semi-skilled, have thus increased. The clerks have increased because of the growth of trade and office work.

It also appears that the percentage of owners of their own businesses has decreased. These are in the main farmers and proprietors (excluding officials). More people are working for fewer employers.

Another significant change has occurred in the distribution of personal income in the last two decades or so in the United States. Prior to 1929, the trend was for the income of all groups to increase but to increase more rapidly at the higher levels, so that income was increasingly concentrated. Since 1929 the trend has been reversed, owing to the elevation of families to higher income levels and to sharp progressive increases in income taxes. Figure 76 shows the diminution of inequality in income distribution. In 1935–36, 69.4 per cent of consumer units had incomes less than $3,000 (in 1950 dollars), whereas in 1950 the percentage was 39.2. In 1935–36, 11 per cent had incomes over $5,000; in 1950, 29 per cent, nearly three times as many. The years 1935–36 were in the depression, whereas 1950 was a prosperous year, hence the measures are those of a cyclical movement rather than a trend. But data for 1929 and 1946, comparable because both are years of business prosperity, with the price level approximately the same, also show a great upthrust of families to successively higher levels of income.[83]

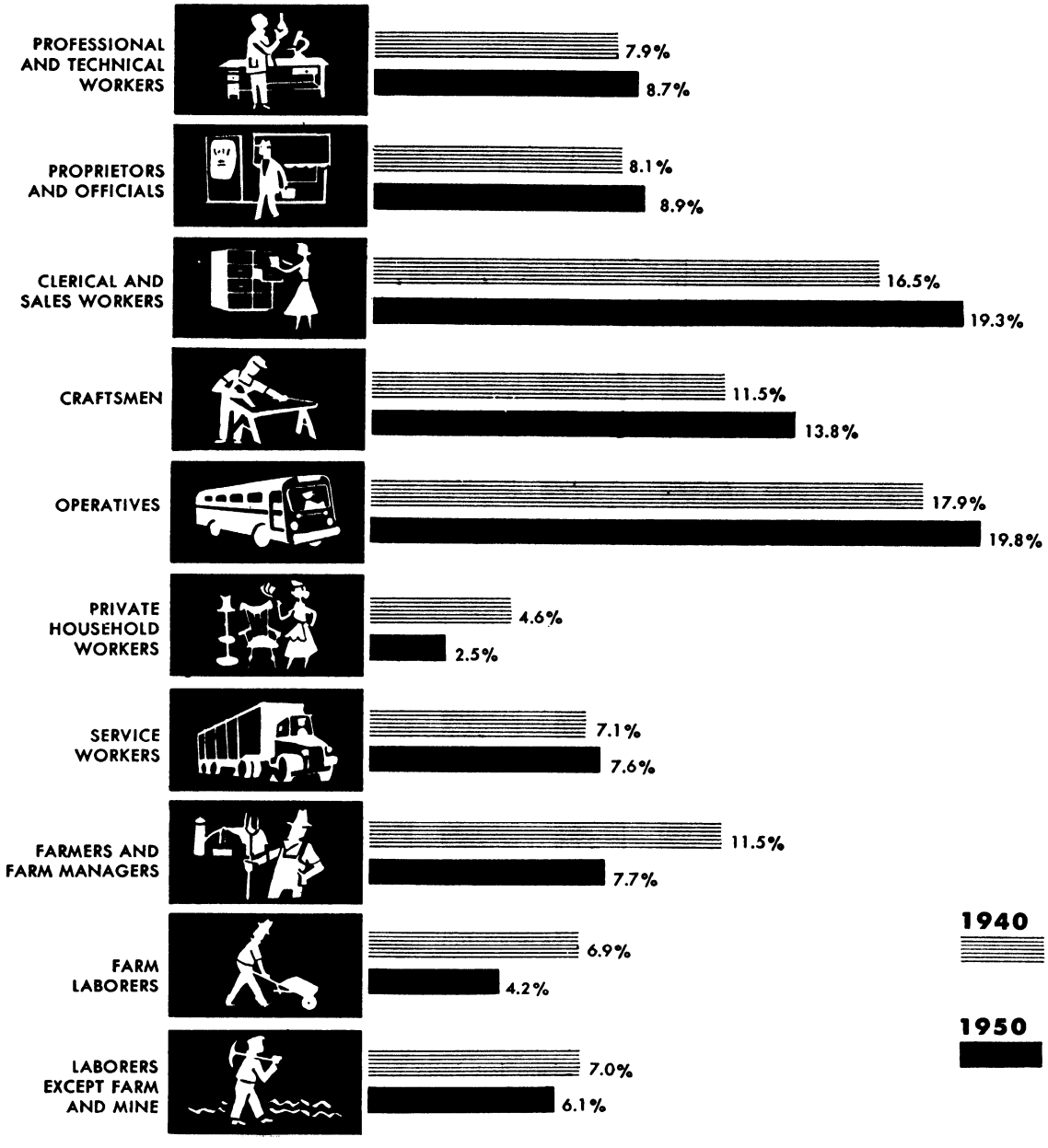
This discussion has been concerned with whether social-class lines have been getting tighter or looser in the United States. A review of inferences drawn from historical trends, as well as the direct study of the mobility of various groups, shows that the evidence is inconclusive and that there is no clear answer to the question of whether there is any significant change in vertical mobility in American society.[84] There have, however, been great changes in the size of occupational groups and in income levels, representing a general upgrading of the population. If the per capita income in the United States rises during the years 1950 to 2000 as it did from 1900 to 1950, the wage-earners of the second half of the century will have the purchasing power of the middle class of the first half of the century and perhaps also the culture.

Social classes and social change. Whether social mobility is increasing or not, there are certain forces of social change at

[82] C. Wright Mills, *op. cit.*

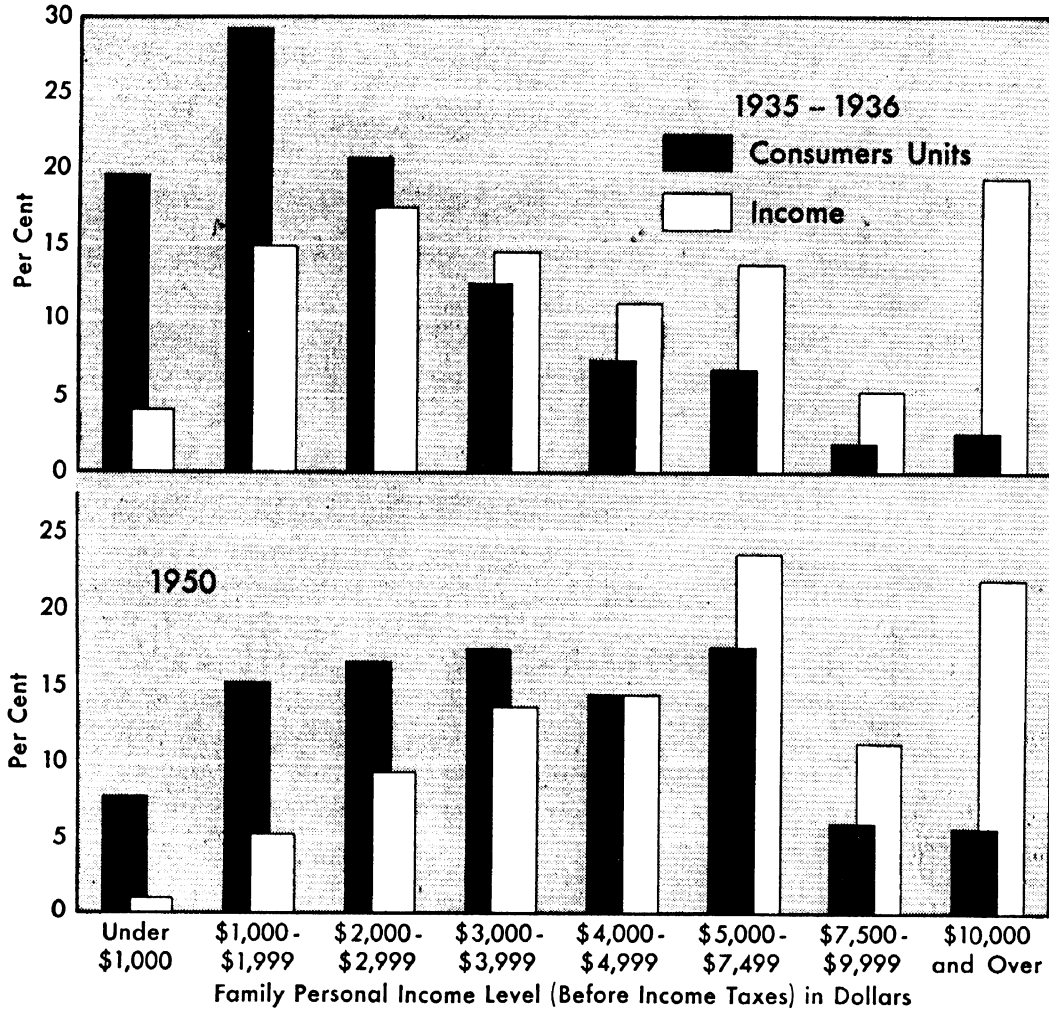
[83] Harold G. Moulton, *Controlling Factors in Economic Development* (Washington, D.C.: The Brookings Institution, 1949), p. 286.

[84] Ely Chinoy, "Social Mobility Trends in the United States," *American Sociological Review*, 20: 180–186, April 1955.



75 Classes of Higher Rank Are Increasing

Strictly comparable data are available only for the decade 1940–50, but the trend since the turn of the century has been to increase the percentage of the population in higher occupational classes. The lowest class, unskilled labor, was more than one third of the number of workers in 1910 and only one quarter in 1940, and even smaller in 1950. This conclusion may be drawn from the data shown above (from *1950 United States Census of Population. U. S. Summary, General Characteristics,* Table 54) and from data (not shown) on 1910–40 from Alba Edwards, *Comparative Occupation Statistics for the United States, 1870 to 1940.*



76 The Rising Levels of Income Among the Masses

Since the 1930's in the United States, there has been a great upthrust of families to successively higher levels of income. Because prices have almost doubled since 1936, the figures for 1935–1936 shown here have been converted into the purchasing power of the 1950 dollar. The first column shows that, whereas in the earlier period 19.5 per cent of all consumer units (families and unattached individuals) had annual incomes under $1,000, by 1950 this proportion had dropped to 7.6 per cent. Although the last column shows that at both periods about one-fifth of the total income was going to the very small proportion of consumer units with incomes of $10,000 or over, nevertheless there has been a steady rise of the population to higher income levels. (Data from Selma Goldsmith and others, "Size Distribution of Income Since the Mid-Thirties," *Review of Economics and Statistics*, 36:1–33, February 1954.)

work in the United States and other complex industrial societies which moderate the influence of social class, retard the growth of class consciousness, and make classes more difficult to detect.

Social change takes a number of forms, one of which is the circulation of individuals from one region to another and from one section of a community to another. Physical mobility is pronounced in the United States. Even as early as 1900, only 68.3 per cent of the American population resided in the state of their birth, whereas a census taken in India about the same time showed more than nine-tenths of the population living in the districts where they were born.[85] The effect of pronounced physical mobility is to produce strangers. To which social class do these people belong? To answer this question accurately calls for knowledge of their occupation, income, and family background — knowledge which we may not possess.

Another way in which modern culture affects class is through the marvelous development in the field of technology and the correlated mass-production system. The effect of these developments is to blur, and in some cases obliterate, the earmarks of class. Lord Bryce's observation on this point was cited earlier in this chapter. Thanks to Hart, Schaffner and Marx, a call boy on Wall Street cannot by his clothes alone be distinguished from a captain of finance. And if this call boy should go, as he can, to a college at public expense, the cultural differences would be still further reduced.

Free universal education, particularly high school education, has been a powerful force in diminishing the earmarks of class, if not in promoting social mobility. The teachers, nearly all of whom belong to the middle socio-economic groups, teach middle-class values to their pupils, better than 70 per cent of whom at the elementary school level represent lower socio-economic groups.[86]

Moreover, the economic classes no longer live in isolation where individualistic traits are nourished, for the effect of modern communication inventions is to break down the barriers between groups. The radio brings to all classes the upper-class culture of the opera, the Wimbledon tennis matches, and the religious services of the fashionable churches. It would be a mistake, of course, to think that inventions do not also create class distinctions when, as at present, the elite are the ones most likely to have private planes and air-conditioned homes. But details and exceptions aside, it is clear that social classes are fostered by stability of social conditions, the perpetuation of things as they are. The rapid social change which is taking place in modern society is hostile to class organization, which depends on the maintenance of a formalized, established social order.

Social classes and nationalism. Another social force today stemming the tide of class consciousness is nationalism, which may be regarded as an outgrowth of modern cultural change. The welding together of separate units of a people is due in part to modern methods of communication and transportation which break down the barriers between local communities and make possible the effective administration of larger areas.[87] Today the more limited allegiance to class is being swallowed up in the larger wave of devotion to the nation. Communists say this is an upper-class technique of control, a tool being used to keep

[85] *Census of India, 1901* (Calcutta: Office of the Superintendent of Government Printing, India, 1903), Vol. 1, pp. 88–89.

[86] W. Allison Davis, "Social and Economic Factors in Learning," in Sidonie M. Gruenberg (ed.), *Our Children Today* (New York: The Viking Press, 1952), p. 266.

[87] See Chapter 13 for fuller development of this point. At one time the Bourbon kings did not address their subjects as Frenchmen but only as Gascons, Burgundians, and the like. Germany at one time was divided into 300 separate states, often in conflict with one another.

the working classes in subjection. Communists frequently refer to the class movement as the Internationale. Nationalism, they say, is an opiate which lulls workers into unawareness of their own interests; and fascism, which in theory commands the subordination of the interests of separate classes to the interests of the state, is said to be only a desperate resort on the part of frightened capitalists to bolster a tottering economic system.[88] The middle class is won over to the support of the totalitarian state. When this is accomplished, the lower classes are deprived of whatever little organized strength they have hitherto achieved; banished are labor unions and gone is the right to strike.

Communism, to be sure, turns the tables so far as partiality to the economic classes is concerned. But it is doubtful that communism is immune to the influences of nationalism. The 1937 Chinese communists ceased fighting the other classes in China when their country was threatened from without and made common cause against the Japanese. In 1939, many thousands of French Communists severed their connection with the Communist Party and hence with their comrades in Russia, when that nation moved against Poland and Finland. In Russia, Trotsky followed Karl Marx in advocating a world crusade in behalf of the proletariat, but he split with Stalin on this point and was banished from Russia. Stalin favored building up the nation first and instituted the five-year plan for the development of Russian resources. Present Russians appear to be quite nationally minded. Modern nationalism clearly acts as a curb to the growth of class consciousness.

[88] Joseph Barnes, "The Social Basis of Fascism," *Public Affairs*, 9: 24–32, March 1936.

SUMMARY

In the interests of continuity and efficiency, social life is organized on the basis of formal positions or statuses which accompany the roles individuals play in the group. Thus age and sex are bases of important ascriptions of roles and status. Likewise family and wealth underlie the social differentiations known as social classes.

The fundamental attribute of a social class is its position of relative superiority or inferiority to other social classes. Classes differ in their opportunities or life-chances, and since classes are subcultures, they differ also in their patterns of behavior. There is also a subjective orientation to class, or a class-consciousness which leads socially inferior groups to show deference to socially superior groups. In times of rapid change, however, the attitude toward the upper class may become one of hostility and result in class conflict.

Social classes are broad groups of individuals between whom there are barriers to social intercourse, especially in relations of intimacy. A position in a social class is provided by the family into which one is born, and ordinarily that position is retained throughout one's lifetime. In all social systems, however, there is some movement of individuals, or social mobility, up and down the social ladder. An open-class society is one in which social mobility is maximal; a caste society one in which it is minimal. The routes of mobility include marriage, education, wealth, and special talents.

Social mobility is favored by the conditions of modern life, such as rapid cultural change, migration, and city life. Modern technology through mass production also obscures the earmarks of class.

QUESTIONS FOR DISCUSSION

1. Why is there stratification in all societies?
2. Which would you prefer, status as a scholar or as a member of the upper class? Why?
3. How do (a) biological factors and (b) cultural factors affect social roles?
4. How are the chances of one's going to college affected by one's social-class status?
5. What are the differences, if any, between rank and status?
6. What advantages, what disadvantages, can you see in a caste system?
7. Is social class a substantive or a classificatory concept?
8. How is the American caste system different from that of India?
9. How long do lags between social class and wealth persist?
10. Why does the American trade unionist aspire more than the British worker to become an entrepreneur?
11. Are class lines tightening in the United States? Elaborate.
12. Is it more difficult to describe the trend regarding class consciousness than that regarding stratification?

TOPICS FOR REPORTS

1. A comparison of the significance of class distinctions in urban and rural communities in the United States.
2. Social stratification on a college campus.
3. Social position in a pioneer community.
4. The utility and the limitations of the concept of social role.
5. The power structure of your home community.
6. The effect of free public education on social classes.
7. Veblen's theory of the leisure class.
8. The social status of American white-collar workers.

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8

Crowds and Publics

On October 30, 1938, thousands of Americans in the New York area were terror-stricken by a radio broadcast describing an invasion from Mars. The presentation was merely a dramatization of H. G. Wells' fantastic novel *The War of the Worlds,* but it was presented with such stark realism — including reports from fictitious astronomers, governmental officials, and "eye-witnesses" — that many listeners fled their homes and their communities.[1] In London on January 15, 1955, a thick belt of darkness, caused by an accumulation of smoke under an extremely thick layer of cloud, suddenly wrapped itself around the city in the early afternoon. It lasted only ten minutes; but during this time, women screamed in the streets, others fell to their knees on the sidewalks and prayed. Some cried out hysterically that they had gone blind. A man at Croydon groped through the inky blackness shouting, "The end of the world has come."[2] These episodes are at once identified as cases of panic,[3] an extreme type of crowd behavior, which is in turn a variety of collective behavior.

[1] Hadley Cantril, Hazel Gaudet, and Herta Herzog, *The Invasion from Mars* (Princeton, N.J.: Princeton University Press, 1940).

[2] AP dispatch, *Jacksonville Times-Union,* January 17, 1955.

[3] Pan, in Greek mythology a god of flocks and wild life, was regarded as causing sudden and groundless fear. On the Acropolis is a grotto for his worship, since Athenians believed he caused panic among the Persians at Marathon.

The concept "collective behavior" would seem on the face of it to be a synonym for "group behavior." But in practice it has a narrower connotation. Collective behavior refers to a limited range of group phenomena, particularly those associated with crowds and publics. Thus fashion and social movements are often treated under the heading of collective behavior, perhaps because they embody some of the characteristics of crowd and public behavior. Prominent among these characteristics is group behavior which is more or less unstructured or undefined by the culture, and lacking in formal organization. Because of the absence of traditional controls, collective behavior is unpredictable, and adjustment is by trial and error. In the interests of coherence of treatment and because of limitation of space, this chapter will treat only two related aspects of collective behavior: crowds and publics.

CROWDS

Ordinarily when we think of the crowd, we picture a group of individuals massed in one place; but as the opening illustration of the chapter indicates, physical proximity is not essential to crowd behavior, especially in a society like ours with instruments of mass communication like the newspaper and the radio. What is crucial to the understanding of the crowd is the highly emotional responses of individuals when they

are released from the restraints that usually inhibit extreme behavior.

The Bases of Crowd Behavior

What releases the customary restraints and leads to crowd behavior? The early students of the subject dealt with crowd phenomena in a mystical manner. LeBon,[4] for example, advanced the idea that when men find themselves in crowds, a collective consciousness emerges and supplants their individual consciousness; this he calls the "law of the mental unity of crowds." Later writers offered more concrete theories but blundered into thinking that crowds are socially abnormal entities. Thus, Martin[5] offers the Freudian view that crowds are the means of release for repressed wishes. According to this theory, tensions are developed in individuals because modern society imposes artificial restraints on the expression of natural impulses, such as, for example, the sexual impulse. Crowds in turn afford opportunity for the release, in indirect, disguised form, of this pent-up energy. While this theory is no doubt helpful in accounting for certain types of crowd behavior, it would be a mistake to conclude that all crowds are unnatural and pathological. By this theory, for example, it would be difficult to explain why crowd behavior occurs among the lower animals, as in the case of a stampeding herd. These remarks suggest that the reader might well be critical of any theory which seeks to account in a simple manner for a complex phenomenon like the crowd. In accounting for crowd behavior, it is necessary to consider the roles of the group and culture.

Crowd behavior is learned. Crowd emotionality can be interpreted in terms of heightened suggestibility, that is, the tendency of an individual in a crowd to respond uncritically to the stimuli provided by the other members. The individual learns early to make almost automatic responses to the wishes of others, particularly those in authority and those he greatly respects. From infancy on, he is so dependent upon the judgment of others for direction in his own affairs that he comes to lean heavily on the opinions of others. Moreover, he learns to value highly the esteem in which other persons hold him, and consequently he courts their favor by conforming to their ways and wishes. For these reasons, among others, when he finds himself in a congenial crowd of persons, all of whom are excited, it is natural that he, too, should be affected.

The effect of suggestion is to produce a partial dissociation of consciousness. When we are critical about a matter, we give it close attention, and our whole interest is centered upon it. But when a suggestion is made by someone whom we esteem, our attention is divided between the issue at hand and the person who made the suggestion. The more awesome the source of the suggestion, the greater the degree of dissociation and the greater the amount of automatic behavior.

One group factor in crowd behavior is the leader who is admired. If the crowd has a leader who is admired, the effect of the suggestion is heightened. The situation is illustrated by hypnotism, where the effectiveness of the suggestion depends on the attitude of the subject toward the hypnotist. No one can be hypnotized against his will, and the best results are obtained where close cooperation exists between subject and experimenter. The effect of suggestion should help us to understand the frenzy stirred up at a camp meeting led by an able evangelist like the late Billy Sunday, or the hysteria generated at a Nazi mass meeting led by Hitler.

[4] G. LeBon, *The Crowd* (London: T. F. Unwin, 1897), p. 26.

[5] E. D. Martin, *The Behavior of Crowds* (New York: Harper & Brothers, 1920).



77 The Crowd Leader Is Like a Hypnotist

The response of the group to the greatly beloved leader is emotional and uncritical, somewhat like the automatic response of the subject to the suggestions of the hypnotist. Note the trancelike state of many of the children responding with the Nazi salute to their hero, Hitler. (Photo by Keystone Press Agency.)

Large numbers increase the volume of interaction. It is to be observed, furthermore, that the crowd heightens the suggestibility of the individual because of the volume of stimulation involved. The individual in the crowd is bombarded by suggestion from every side, and the cumulative effect is very great. Also, the emotion works around in a circle and so is still further enhanced. For instance, A is affected by the excitement of B, C, and D. A, excited, in turn stimulates B, C, and D and increases their excitement, which reacts on A and further heightens his emotions, and so on. Such mounting contagion is seen frequently in religious revivals, where individuals are progressively stimulated until they give way to extraordinary behavior, such as barking, or bouncing, or jerking in every joint.

Milling and crowd rhythm. It is known that suggestions are more effective if they are even and regular and continuous. Crowds may furnish such rhythmic, repetitive stimuli, if there is milling about in the crowd. In addition, crowd activities, such as singing, cheering, dancing, and so forth, follow rhythm patterns. They serve to break down the barriers between individuals and accentuate the feeling of group solidarity. Demagogues, evangelists, and other skilled leaders use these techniques in winning crowds to their purposes. The orator is an expert in rhythmic speech; he literally as well as figuratively sways his audience.

Security in the anonymous group. The group factor also influences crowd behavior through the security which the individual feels when he is part of the mass. In-

dividuals are less reluctant to join a lynching party than to commit murder on their own. The explanation would seem to lie partly in the fact that the action seems more defensible when carried out by the group and partly in the fact that individual responsibility is blotted out. The participants remain anonymous and there is no one upon whom the authorities can pin the offense. This condition, in which the group does not identify its members as individuals and which therefore has been called "de-individuation," leads to reduction of inner restraint and to more expressive behavior.[6]

However, if an individual has attitudes and habits which are fundamentally opposed to those of the crowd, he will not follow the crowd. A critical student of religion who has a real aversion for emotional appeals is not likely to be carried away by the frenzy of a revival meeting. White men have been aroused to extremes of emotion when in a mob attacking Negroes, and on certain occasions, as in the Chicago race riots, mobs of Negroes have shown the same intensity of feeling toward white victims; but there is no record of a Negro enthusiastically joining a mob of white men about to lynch one of his own race.[7] The crowd cannot elicit behavior for which there does not already exist a favorable basis in established attitudes and habits.

How Culture Affects Crowd Behavior

Societies usually curb or limit crowd behavior because it disrupts the social order. In some social situations, however, there may be no cultural directives or the directives may be inadequate or conflicting, with the result that release from the usual restraints and doubts occurs when there is provocation. Examples are the raids made by male college students on women's dormitories or the damage to property sometimes done by crowds of celebrating students after an important football victory. Our culture teaches respect for property, but it also harbors the idea that college life is not quite complete without its pranks and hilarity.

Societies also differentiate sanctioned and tabooed crowd behavior. Our own culture approves reveling crowds on special occasions, like those that gather on New Year's Eve, but disapproves sexual orgies that are permitted from time to time in some primitive societies. Generally we try to contain crowds motivated by hatred, like those bent on lynching, if there are formal agencies for dealing with alleged offenders. We do not discourage either admiring crowds like those that besiege Hollywood celebrities, or conventional, expressive crowds such as those involved in rallies and demonstrations. Such demonstrations overcome apathy, build group determination, and sometimes help to carry out difficult tasks. If they are permitted to give expression to emotions which are ordinarily restrained, crowds provide relief from tension. But if crowds are not controlled, they may readily get out of hand.

As to differences in crowd behavior in modern societies, the opening paragraph of this chapter related how in 1938 in the United States, thousands of people were frightened by a radio broadcast purporting to describe an invasion from Mars. While there was considerable resentment afterwards, when it was understood that the program was fictitious, there was no further group action. About a decade later, a similar program was broadcast in Quito, Ecuador, in which it was announced that strange creatures from Mars were landing nearby and heading for Quito. The program, it is

[6] L. Festinger, A. Pepitone, and T. M. Newcomb, "Some Consequences of De-Individuation in a Group," *Journal of Abnormal and Social Psychology*, 47: 382–389, 1952.

[7] Ellsworth Faris, *The Nature of Human Nature* (New York: McGraw-Hill Book Company, 1937), p. 76.

THE MASSES ARE ASSES

One of the most horrifying mass riots in the history of the University occurred last night as an estimated 3,000 college "men" broke into sorority houses, causing thousands of dollars damage, losses and physical injuries.

Practically every sorority house was literally wiped out, furniture and windows broken, money, watches, dresses stolen — all in a playful attempt at that springtime sport, the panty raid.

In many of the houses girls locked themselves in the housemothers' room, or any room with a lock, and stood helplessly by while the gangs "stormed the palace."

The few girls who dared to face the mob with hot irons, paddles or table lamps, were knocked around, assaulted, carried outside in pajamas or nude. Housemothers fared no better, several being shoved aside and even knocked down by the mob.

It all started with some warm afternoon water fights — a little innocent fun. Maybe some people and houses got wet, but that didn't hurt. They dry. But the afternoon turned into evening, and the fellows got together and decided to make a night of it.

Then what started out as fun turned into tragedy — and a disgusting one. Not only the money involved, but the time spent building up a wardrobe — disintegrated in a few short hours.

And the Berkeley police stood by, helpless as the mobs went along their jaunts to one house after another.

Berkeley merchants may have a lot of business today — that is, if the girls have enough money to restock underwear. They have to. They haven't any left.

Where are they going to get the money?

Maybe fraternities and living groups involved will donate it. Or perhaps they will be asked to do so by the administration.

If each men's living group were assessed approximately $200 and this donated to the 23 sororities, each house would receive $400-500 which at least would begin to meet the damages.

Some action must be taken, by the administration, Student Judicial committee, Interfraternity Presidents' council and Men's Residence association.

A tragedy, by definition, is something which could have been prevented by a different decision or action. Maybe this couldn't have been prevented once it started, but it could certainly be remedied.

One participant in the night of debauchery boasted, "Man, we didn't miss a single sorority house."

Maybe punishment shouldn't miss a single fraternity.

78 The Masses Are Asses

Shown above is an editorial appearing on May 17, 1956, in the *Daily Californian,* the student newspaper of the University of California at Berkeley. In a lengthy white paper, issued a few weeks later, after an investigation of the panty raid, Chancellor Clark Kerr referred to this editorial as "a most distorted and damaging editorial obviously written hastily and in some heat." The white paper states that no woman student was carried from a house or stripped of her clothing and that no one was injured. Damages however totaled nearly $12,000, two students were dismissed from the university, and other penalties were imposed.

reported,[8] drove most of the population of Quito, some half-clad, into the streets before the program directors learned how much consternation they had caused and appealed to the populace to be calm, assuring them that the announcements had been fictional. Enraged, the people swept upon the building which housed the radio station, crashed the windows with stones, and then set fire to the building, killing six persons and injuring many others. Conclusions must be drawn with care, since the details of the Ecuadorian experience are not available; but if we may assume that the broadcast in the two countries was approximately the same — as the news dispatch suggests — then the difference in crowd response reflects a difference in culture.

Observers have been impressed with the contrasting conduct of crowds in America and in England. In the United States, large celebrating crowds are likely to be boisterous, careless of public property, and disrespectful of law and order. After a celebration in a public park in an American city, the ground is likely to be covered with old newspapers, empty pop bottles, and other litter. After the July 4, 1949 weekend in Chicago, 225 tons of litter were picked up from the beaches and parks and park strips by 500 to 600 workers.[9] In England, not thousands but actually millions of people camped for days on the public park facing Buckingham Palace during the celebration of the twenty-fifth year of King George V's reign, and it is reported that when the affair was over not a single flower had been plucked from the large flower beds.[10]

[8] AP dispatch, *New York Times,* February 13, 1949.

[9] Statement by Public Information Service, Chicago Park District.

[10] Sir Philip Gibbs, *England Speaks* (Garden City, N.Y.: Garden City Press, 1935), Chapter 1. "Emotional reserve" and "self-control" are mentioned as dominant traits of English culture by Ruth Benedict, "Configurations of Culture in North America," *American Anthropologist,* 34: 1–27, January–March 1932. Also Geoffrey Gorer, *Exploring English Character* (London: The Cresset Press, 1955).

Interesting contrasts are also presented by rioting mobs in different societies. Assault and battery are much more common in English-speaking countries than in France, where rioters wreak their vengeance on property rather than on persons. In the widespread Paris riots of 1934, so extensive as to lead some observers to believe a general political upheaval was imminent, there was much damage to property but little loss of life. This has been attributed to a number of factors, such as the effect of the Catholic religion, with its emphasis on the sanctity of human life, and the stringent French laws against assault, which date back to the days after the Revolution.[11]

Checks on Suggestibility

With the growth of culture, man has taken steps to protect himself against his own impulsiveness. His problem is to keep from reacting instantly and automatically to suggestion. To solve his problem, man has in the course of time developed various devices such as the debate, the public forum, and the scientific method. In a debate the suggestions released by one side are challenged by the counter-suggestions of the other side. The forum provides even more protection against the dangers of suggestibility because the participants are encouraged to ask questions and to cross-examine the spokesmen for particular points of view. Science and scientific method furnish the greatest protection against emotional and irrational conduct. Suggestions are not enough, science demands evidence. The evidence, besides, must conform to certain conditions required by logic and scientific method. The seal of science is withheld from any finding until it is verified and found to be reliable.

[11] R. LaPiere, *Collective Behavior* (New York: McGraw-Hill Book Company, Inc., 1938), p. 548.

Cultural devices such as those just indicated are useful as checks on suggestibility, even though they do not constitute a complete defense against irrational or emotional conduct. Cultural aids such as schooling or scientific training lessen the chances that a person will behave irrationally or irresponsibly in certain situations. This is shown by an experiment [12] at the University of Iowa in which a simulated kidnaping episode was worked out in detail as to locale, persons, and timing. The episode was then reported in a series of news bulletins. By pre-arrangement, a dramatic reader appeared before some classes in psychology and read the bulletins. The kidnaper had been caught, had confessed, and a mob was forming to lynch him. What part would the students wish to play? Only one subject in ten would resort to drastic action. "With respect to age, college education, and the best evidence available on general intelligence, the averages for subjects electing the different courses of action increased similarly and consistently along the scale as the subjects respectively elected to participate in, observe, deter and avoid action." In other words, the students tended to avoid mob behavior as they approached the higher end of the scale in age, college education, and general intelligence. These facts support the findings of another study [13] that most participants in lynching mobs in the United States are shiftless or uneducated youths. Education may lessen the probability of crowd contagion, even if it does not eliminate it.

Man may seek to protect himself by avoiding crowds. It is not uncommon for those who have creative work to do to isolate themselves. John the Baptist went into the vastness of the desert to meditate; his was "a voice crying in the wilderness." It was the top of Mt. Sinai that Moses chose for communing with his God. Many writers and scientists lock themselves in study or laboratory. Browning shut himself up in his workroom for days at a time. When hot on the trail of a new invention, Thomas Edison worked, ate, and slept in his laboratory, protected from all disturbance. While in some cases the primary motive for such isolation is the desire to avoid distraction and interruption, certainly in other cases the motive is to get "far from the madding crowd" in order to be able to think more clearly.

Isolation from others is easier to achieve in modern urban society than it was in times past, when individuals living side by side in a community were neighbors intimately acquainted with one another. One could scarcely withdraw from the group without attracting attention. In the city, on the other hand, where even neighbors may be strangers, the anonymity of life affords considerable freedom from group or crowd pressure. Urban experience is organized more in terms of impersonal interests, and is influenced less by proximate contacts. Hence the position one takes on social issues may be influenced more by conviction and less by consideration for the feelings of one's associates. This means that in the city, public opinion can be more objective and rational than it is in a folk society.

PUBLICS

Publics are inclusive interest groups, usually with divergent opinions concerning social issues. When the interest of a group of individuals in a social issue or set of social values is more abiding and more rational than it is in a crowd, we call the group a public. There are many publics in our society today, as indicated by the con-

[12] N. C. Meier, G. H. Mennenga, and H. J. Stoltz, "An Experimental Approach to the Study of Mob Behavior," *Journal of Abnormal and Social Psychology,* 36: 506–524, October 1941.

[13] A. F. Raper, *The Tragedy of Lynching* (Chapel Hill, N.C.: The University of North Carolina Press, 1933), p. 11.

tent of a daily newspaper which caters to publics and which reflects the social life of the community. Sections of the daily paper which are devoted to stocks and bonds and business affairs are read by the financial public; there are sections of interest to the athletic, motion picture, radio publics, and so on. The concept, public, derives its vitality mainly from the fact that while large groups of individuals have sustained common interests, they do not necessarily have common viewpoints. Thus the motion-picture public is divided over such issues as the best picture of the year, the relative merits of the various stars, and the necessity for censorship of the industry. We see from this that the public is characterized by discussion and controversy, hence by the formation of public opinion. It is the dependence of the public on processes of discussion that chiefly sets it off from the emotional crowd.

When members of a public take positions on issues confronting them, the result is public opinion. Issues arise when there is conflict, anxiety, or frustration as a result of social change; and public opinion, therefore, as the process of collective decision-making, represents an attempt to establish a new equilibrium.[14]

Publics are characteristic of complex societies. In a small, simple, stationary society, like that of a primitive people where culture is not highly developed, the number of interest groups will be small and the number of social issues that arise will be few, because conditions remain relatively unchanged over long periods of time and because such problems as arise can often be dealt with in terms of the prevailing folkways. In a complex, rapidly changing society like ours, however, there is a great proliferation of interests and therefore of publics; and the issues that beset publics under conditions of rapid change may be numerous and acute. To illustrate the contrast, when illness arises among primitive people, the medicine man is called in. There is not much alternative to using him and little question about how he shall be paid. But in our complex culture, various publics prefer various kinds of "medicine men": physicians, osteopaths, faith-healers, herbists, occultists. There is considerable difference of opinion about how physicians shall be paid. A large section of the public would like to see the doctors employed by the state just as school teachers are; others advocate systems of voluntary insurance against doctors' bills; while the medical profession on the whole prefers to retain the private-fee basis.

When groups are small and issues arise, it is not difficult to ascertain the opinions of the members of the group as a basis for decision and action. In colonial times in America the smallness of the rural communities made it possible for most, if not all, of the citizens to gather on the commons or at the town hall and at this "public assembly" to consider and take action on the issues confronting the group. Such local publics are still found in rural areas, but in the cities the size and complexity of the group make them inoperative. Many issues moreover are nation-wide and involve millions of persons.

The modern poll is a social invention for sampling opinion. Those who determine policy with regard to social issues are generally interested in knowing the state of public opinion on the issue, since it is easier to implement a policy if it has public support, especially in a democracy like ours where the public has an important role in the resolution of issues. Members of Congress would like to know how the voters, whom they are supposed to represent, feel about the issues before them. If it were necessary to canvass

[14] Leonard W. Doob, *Public Opinion and Propaganda* (New York: Henry Holt and Co., Inc., 1948).

all the voters on their attitudes toward universal military training, expanded social security, aid to education, public low-cost housing, etc., the cost would be prohibitive. The solution is the modern poll with its device of selective sampling, where the aim is to question a sample that is representative of the whole. In an election, the outcome depends on all who vote, hence an effective poll is one that samples the same proportion of subgroups as occur in the electorate. The aim is to poll at random Negroes and whites, rich and poor, men and women, farmers and urbanites, etc., giving weights to replies according to the proportion they constitute of the electorate. Techniques have been devised whereby small samples may be used, and the possible margin of error calculated. In view of the value of scientific methods of sampling public opinion, it is not surprising that polling should have developed into a substantial and flourishing enterprise.

In a democracy, the social function of polling may be great. For instance, polling makes planning easier. The army knew two years in advance within 3 per cent the number of G.I.'s who would go to college. The polls may also be a factor in reform. The results of polls on important issues are carefully scrutinized by Congress. Poll votes on rearmament, higher taxes for defense, the draft, price control, wage control, rationing, and an anti-strike law during wartime indicated that these issues were all endorsed by the people before Congress acted.[15] This may mean that the polls influenced the Congress, or it may mean that the polls vindicate political democracy by showing the wisdom of the people.[16]

Do the polls influence public opinion? An interesting question is whether the results of the polls, when announced, affect public opinion. Do they create a bandwagon effect, converting others to the side of the majority? Some critics allege this to be so, but the evidence is inconclusive. The prestige of majority opinion is well-known, and there is some experimental evidence[17] to indicate that people's attitudes may be changed by learning the results of public opinion surveys. On the other hand, the pollsters point to the *Literary Digest* poll of 1936 which predicted an overwhelming victory for Alfred Landon who lost the election, and to the election of Harry Truman in 1948 despite almost unanimous agreement of the polling services that he would be defeated.[18] It is even possible that the polls may in some instances produce an anti-band-wagon effect by building up sympathy for the underdog; or the polls may give the favored group such a false sense of security that they relax their efforts, while the opposition works harder. Some believe such a false sense of security to have been a factor in the outcome of the 1948 presidential election. In addition, then, to gauging public opinion, the polls may be a factor in the formation of public opinion, although the nature of the influence is obscure.

Limitations of polls. The polls have not been immune to criticism. It is charged[19] that the polls claim to measure public opinion without ever having defined public opinion. Public opinion is not just voting, not a mere "yes" or "no" or "don't know" or "don't care." Public opinion, "the aggregate of the views that men hold regarding matters that affect or interest the community," is often a complex, shifting phenomenon. The brief answers that people are

[15] Stuart Chase, *The Proper Study of Mankind* (New York: Harper & Brothers, 1948), p. 179.

[16] William A. Lydgate, *What Our People Think* (New York: Thomas Y. Crowell Company, 1944).

[17] Winston Allard, "A Test of Propaganda Values in Public Opinion Surveys," *Social Forces*, 20: 206–213, December 1941.

[18] Frederick Mosteller *et al.*, *The Pre-Election Polls of 1948* (New York: Social Science Research Council, 1949).

[19] Lindsay Rogers, *The Pollsters* (New York: Alfred A. Knopf, Inc., 1949).

willing to give to strangers may not be an adequate measure or indicator of complicated opinions. Nor, even in a democracy, do the opinions of all citizens carry equal weight, except in voting.[20] Some who hold intense opinions may be more successful in influencing others than those who hold their opinions lightly. Some citizens, like journalists and commentators, are strategically placed to influence opinion. Policy on many questions is influenced by organized groups having power in the community rather than by mere numbers of majorities of citizens. Moreover, many decisions with regard to social issues are made by those in authority, without resort to the democratic process.

PUBLIC OPINION MANAGEMENT

Publics are often scattered, loosely organized, and confused. On the other hand, there are in modern society various organized groups of individuals who know what they want and how to get it. They have products, or services, or ideas they wish to sell. Some already have a "corner" on a particular market and are called "vested interests." Others are seeking to wrest power from the vested interests, and, if successful, to become in turn vested interests themselves. Both realize that to enjoy power they must have the support of public opinion, or, at least, public opinion must not be unfavorable toward them. When he was told there would be a public reaction against some of the practices he was using to build up his great railroad empire, Commodore Vanderbilt was quoted as saying, "The public be damned!" Whether or not he actually did say this, he was shrewd enough to deny it instantly.

Since Commodore Vanderbilt's time, captains of industry have learned not only to respect public opinion but to control it. An outstanding example of a long-term public relations program is that of the American Telephone and Telegraph Company. The purposes of this program are primarily to increase the volume of business done by the company and to maintain the monopolistic benefits already possessed. To attain these ends, a central idea is held constantly before the public: that the company is a public service operated in the best interests of the public. To create a sympathetic and uncritical attitude toward the company, the service is identified with values or symbols that have favorable sentimental significance for the masses of the population, such as courage and the home. The inner workings of the system are revealed; the hazardous operations of the linesmen, and the impression is given that the company is a vital protector of life and property. The telephone is shown as a device linking those away on business and their loved ones at home. Played up, too, is the fact that the company stock is owned by hundreds of thousands of investors, creating the illusion that the company is, after all, a publicly owned enterprise. The Federal Communications Commission, after investigating these practices, concluded they were designed to "lull the public into a satisfied and sympathetic frame of mind."[21] The American Telephone and Telegraph Company is not alone, however, in its quest for public support. Almost every large corporation now has on its payroll individuals whose business it is to create public good will toward the management, its policies, or its products. A relatively new, highly paid professional group has emerged, the public relations counselors.

Pressure Groups

Most publics are organized on an opinion basis; that is, they are concerned with the

[20] Herbert Blumer, "Public Opinion and Public Opinion Polling," *American Sociological Review*, 13: 547–549, October 1948.

[21] Special Investigation Docket No. 1, Vol. 4, June 15, 1937.

discussion and determination of issues. When, however, a public moves from opinion to action in an effort to make its will effective, and particularly to secure legislation favorable to its own interests, it may be designated a *pressure group*. Our own society is characterized by a great number of such pressure groups, each seeking to gain some sort of advantage by securing the support of those who have power, as for instance the voters or their elected representatives. Hundreds of organizations such as the American Legion, the Chamber of Commerce of the United States, and the American Federation of Labor, maintain permanent offices in Washington, D.C., and agents in the various state capitals whenever required, for the purpose of applying pressure to gain their special ends. These agencies are often engaged in a political tug-of-war, with the outcome greatly affected by the relative power and strength of organization of the competing groups. Groups that are unorganized or poorly organized and therefore lacking in influence, like unskilled workers and consumers, are at a great disadvantage in protecting their interests. Lobbies are rather necessary in the United States, because representation in the legislative bodies is based on geography or population rather than on interest groups, as in some other countries. The influence of lobbies in Congress is such that they are sometimes referred to as the Third House.

Pressure groups in the news in recent years include the China lobby, the farm lobby, the American Medical Association, the labor lobby, the tariff lobby. Less prominent, but presented here in some detail because its activities have been documented more fully than most other lobbies, is the Anti-Saloon League,[22] begun in 1895 by 49 different temperance and religious groups as a national organization with paid professional workers agitating for the abolition of the liquor traffic. At first the League appealed to the individual to abstain from alcoholic drink and called for the signing of a pledge to this effect. Later, the drive against the saloon was started, and finally came the movement for national prohibition. The national organization tied up with state and local committees operating through churches and other established agencies such as the Women's Christian Temperance Union and the Civic League. It is estimated that the League at its height had the support of about 60,000 agencies. Committees of voters were formed in the manner of machine politics; states were marked off into districts, districts organized by counties, and counties by wards, precincts, or townships. A paid superintendent was provided for each district and a paid manager for each county, the other units being served by volunteer captains and lieutenants. Odegard characterizes the organization as a "politico-ecclesiastical machine."

The functions of the League consisted in promotional activities, largely of a propagandistic nature, and in direct political pressure. In connection with the former, the League established in 1909 a printing plant of its own, the American Issue Publishing Company, at Westerville, Ohio, which by 1912 had eight presses printing more than 40 tons of temperance literature, including 31 state editions of the *American Issue*, with a total monthly circulation of more than 500,000. From the time the plant was established up to January, 1923, it produced 157,314,642 copies of temperance papers. In addition, there were released about two million books, five million pamphlets, 114 million leaflets, two million window cards, and 18 million other cards. "The liquor business was drowned in a flood of temperance literature."

As for the method of direct political pres-

[22] Peter Odegard, *Pressure Politics: The Story of the Anti-Saloon League* (New York: Columbia University Press, 1928).

sure, the League put up no candidates of its own but instead supported those of the established parties who were favorable to its policies. In 1899, offices were opened in a building just across the street from the national capitol, and agents were in constant touch with legislative matters affecting the League. Information from the League's point of view was furnished congressmen; agents attended legislative hearings, and in many cases drafted and introduced bills. The weapon the League wielded over recalcitrant representatives was the threat of defeat at the next election.

That the League was effective can scarcely be denied. An account of the temperance legislation passed by Congress in which the League had a hand would fill a large volume, to say nothing of victories achieved in the separate states. Besides the two outstanding victories of the prohibition of interstate shipment of liquor into dry states in 1913 and the Eighteenth Amendment, the League was instrumental in securing the following national legislation: 1902, saloon substitutes at army posts; 1903, prohibition of sale of intoxicating liquor at immigration stations; 1906, Soldiers' Home Canteen Law; 1906, prohibition enforcement in Indian Territory; 1908, anti-liquor code for Alaska; 1909, prohibition of the use of the mails for transportation of liquor.

Propaganda

The League had also an extensive promotional program, largely propagandistic in nature. For instance, the saloon was pictured as the enemy of the child and the home; as the source of all crime, degeneracy and poverty; indeed, as the epitome of all that was vicious in society. The League exploited the recruiting of youth by saloons, publishing widely such advertisements as the following[23]:

> WANTED: BOYS FOR CUSTOMERS
>
> Most of our old customers are rapidly dropping out.
>
> Ten committed suicide last week.
>
> Twenty are in jail — eight in the chain gang.
>
> Fifteen were sent to the poorhouse. One was hanged.
>
> Three were sent to the insane asylum.
>
> Most of the rest are not worth fooling with; they have no money.
>
> WE NEED FRESH YOUNG BLOOD

Propaganda is an effort at mass persuasion. Because in our day one is bombarded on all sides by propaganda, it is desirable to understand what propaganda is and how it operates. Propaganda is one of four basic instruments which modern groups employ in efforts to achieve goals, the other three being physical conflict, economic methods, and diplomacy.[24] In physical conflict, exemplified by war, the attempt is to coerce through violence. Economic methods include gifts and loans, using goods or services. Diplomacy uses negotiation and contracts. In contradistinction, propaganda aims at persuasion by means of symbols, that is, words, pictures, or gestures.

Does propaganda differ from education? A question often asked is: how does propaganda differ from education? Like propaganda, education uses symbols; but unlike propaganda, education aims at clarification, not persuasion. Propaganda seeks to influence decisions in ways favorable to the propagandist, whereas education provides information on the basis of which decisions may be made, if called for or desired. In terms of this distinction, it is apparent that, in some instances, what passes for education is actually propaganda, or special pleading. Propaganda may get into education via the ethics and religion of the in-

[23] *American Issue* (Ohio edition), January 11, 1908.

[24] Daniel Lerner, *Propaganda in War and Crisis* (New York: George W. Stewart, Publisher, Inc., 1951), p. 346.

structor who communicates his preferences and convictions to his students.

Propaganda and advertising. Nearly all advertising is labeled as advertising, and there is no difficulty in knowing that it is advertising. In this sense it differs from propaganda, which is not so clearly signalized. Thus when an English scientist comes over to America to comment on social problems, it is not always clear that he is supported by British propaganda funds. Both advertising and propaganda, of course, try to persuade the individual and neither presents both sides adequately. But the payment aspect of advertising is obvious, whereas it is more frequently under cover in propaganda, and readers are less able to discriminate between what is fact and what is fancy.

Why propaganda has a bad reputation. To many, the term "propaganda" carries an evil or sinister connotation. This may be partly because of a bias in favor of impartial evidence, which the prestige of scientific method has helped to establish. It may also be due to the fact that propaganda is often devious. The propagandist, like the puppeteer, often works out of sight; we are influenced without knowing it. A number of years ago, for instance, an investigation [25] brought to light the pervasive propaganda which the public utility interests in the United States had been carrying on for many years. It was found that these interests had succeeded in incorporating into the textbooks of the public school certain material which gave a very favorable view of private ownership and a very unfavorable view of government ownership. A similar point of view was emphasized in college textbooks in economics. Few students reading this material would ever suspect that they were being victimized. Propaganda of this type is the promotion of emotional attitudes on one side of controversial subjects, usually by indirect means.[26]

Propaganda techniques. Since propaganda is a symbolic process involving conversion by suggestion rather than by such methods as violence, bribery, or boycott, the techniques of propaganda revolve around the manipulation of symbols. Some of the techniques are exceedingly complex and to list all would require a manual, but it is possible here to cite briefly a few of the fundamental methods by which the propagandist manipulates attitudes.

First, repetition is essential. If you have an idea to put over, keep presenting it. If the idea is not reinforced by repetition, it will be forgotten. This, however, has to be done with skill and care, lest weariness and resistance set in.

Second, a common device is card-stacking, or presenting only one side of the argument. Do not admit, do not even suggest, that there is any side to the question but the one you represent. This means that you must distort the evidence. The Anti-Saloon League claimed that between 60 per cent and 100 per cent of all divorce was due to

[25] The story of the propaganda campaign of the electric utilities is told in a report by the Federal Trade Commission (Senate Document 92, 70th Congress, 1st Session), which runs to about 100 volumes. A summary of the testimony given in the first four years of the hearings appears in Carl D. Thompson, *Confessions of the Power Trust* (New York: E. P. Dutton & Co., Inc., 1932). See especially Chapter 39, "Revising the Textbooks," and Chapter 40, "Our New School Books." "Besides the pamphlets above referred to, which were prepared especially for use in high schools, grade schools, and to a greater or less extent for general distribution, the utilities were also diligent in the preparation of textbooks of a more advanced and technical nature for use in colleges, universities, and technical schools." Thompson, *op. cit.*, p. 384.

[26] H. D. Lasswell, R. D. Casey, and B. L. Smith, *Propaganda and Promotional Activities: An Annotated Bibliography* (Minneapolis: University of Minnesota Press, 1935). A continuation, up to about March 1943 is: B. L. Smith, H. D. Lasswell, and R. D. Casey, *Propaganda, Communication and Public Opinion* (Princeton, N.J.: Princeton University Press, 1946).

CZECHS WARNED ON CLASS ENEMIES

Counter-Revolutionaries Are Blamed By Reds in Prague for Hungarian Uprising

By FLORA LEWIS

Special to the New York Times

PRAGUE, Czechoslovakia, October 25—The Czechoslovak Communist party today gave its official interpretation of the fighting in Hungary as an "attempt by counter-revolutionary elements to overthrow the people's democratic regime."

Czechoslovakia was warned that she must maintain the strictest vigilance against class enemies. . . .

All Prague newspapers, including the Communist party's organ, Rude Pravo, carried the same dispatch on Hungary. It said "liquidation of counter-revolutionary bands is now proceeding." The Hungarian Government's request for the intervention of Soviet troops "to help restore law and order in the country," was reported. . . .

HUNGARIAN REVOLT SPREADS; NAGY TOTTERS; THOUSANDS IN ARMY FIGHT SOVIET TROOPS; U.S. CONSULTS ALLIES ON TAKING U.N. ACTION

Reporter in Budapest Tells How Protest Grew Into War

Account from the Embattled City Says Soviets' Massed Tanks Slowed Revolt, Which the Massacre Then Rekindled

By JOHN MAC CORMAC

Special to the New York Times.

BUDAPEST, Hungary, October 26—What began here Tuesday as a demonstration turned that same night into a revolution and yesterday became a war that was still raging today.

It is war by Soviet troops and Hungarian political policemen against the mass of the Hungarian people. The war is being waged on behalf of the Soviet Union and in support of the Hungarian Communist Government, which would fall in 10 minutes if it were not for the presence of Soviet tanks in Budapest. . . .

79 Two Reports on the Same Event

Here are two stories, published a day apart in the *New York Times*, on the dramatic Hungarian revolt of 1956, both offering an explanation of the conflict. Is either propaganda? (From the *New York Times*, October 26, 1956, p. 10; October 27, 1956, p. 1.)

liquor — in reality a relatively minor factor. The public utilities compared the costs of electric power furnished by some of the most favorable privately owned plants with some of the poorest municipally owned ones. Something they neglected to mention was the fact that certain communities regularly earn a large enough profit from the sale of power to be able to dispense with property taxes.

Recent research[27] using indoctrinating films with American soldiers in World War II has shown that under certain circumstances something is gained for one's cause by presenting both sides of the argument on a controversial issue. This is true where those to be influenced are of superior intellectual ability, and it is true also where the individuals to be influenced are initially opposed to the viewpoint being advocated. Presenting both sides was least effective with the less intelligent subjects who initially approved the opinion being advocated, and even produced a slight adverse reaction. Thus the most effective use of arguments for and against a controversial issue appears to depend on the intelligence and initial predilection of the group.

Third, cast your cause in the role of the hero and your opposition in the role of the villain. Resort to generalities, emotionalized symbols, and stereotypes to build up affection for your hero and hatred of the enemy.

[27] Carl I. Hovland, A. L. Lumsdaine, and Fred D. Sheffield, *Experiments on Mass Communication* (Princeton, N.J.: Princeton University Press, 1949).

The Anti-Saloon League linked God to their cause and Satan to the saloon.

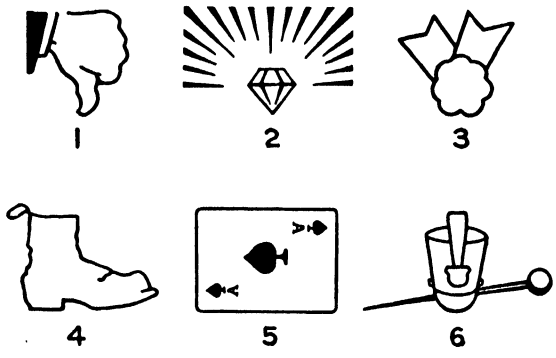
Fourth, produce testimonials in behalf of your cause, supplied by persons whose names carry a great deal of weight.

Fifth, "for the most permanent eventual results, aim your propaganda at the children; mix it in your pedagogy." [28] The totalitarian states furnish excellent examples of the application of this principle. Supporting evidence comes from eight small towns in western Washington, where leaflets were dropped by airplane, telling about possible use of the leaflet in an air raid. Interviews showed a larger percentage of children knew the message than did adults. The children were also more likely to find the leaflets and pass them on.[29]

The newer methods of content analysis. In the early stages of propaganda analysis, represented by the work of the Institute for Propaganda Analysis, the content of the propaganda document was analyzed in terms of the devices and symbols shown in Figure 80. This method, while an improvement over earlier, less standardized procedures, was deficient in that no attempt was made to ascertain the reliability and validity of the analyses, nor the effectiveness of the propaganda itself. Later research has shown that content analysis is highly complex, involving the problem of sampling, the selection of units of measurement, and the selection of categories. It is important, moreover, by means of "focused interviews" to determine the effect of the propaganda campaign, for the propagandist does not always achieve the results he seeks. Propaganda efforts may, in fact, boomerang for a variety of reasons, such as the erroneous appraisal of the predispositions of the audience being propa-

[28] Knight Dunlap, *Civilized Life* (Baltimore: Williams & Wilkins Company, 1934), pp. 360–361.

[29] O. N. Larsen and M. L. DeFleur, "The Comparative Role of Children and Adults in Propaganda Diffusion," *American Sociological Review*, 19: 593–602, October 1954.



80 Some Common Propaganda Devices and Their Symbols

(1) *Name-calling* — giving an idea a bad label — is used to make us reject and condemn the idea without examining the evidence. Symbolized by the ancient sign of condemnation used by the Vestal Virgins in the Roman Coliseum, a thumb turned down.

(2) *Glittering generality* — associating an idea with a "virtue" word — is used to make us accept and approve the idea without examining the evidence. Symbolized by a glittering gem that may or may not have much intrinsic value.

(3) *Testimonial* — having some loved or hated person approve or condemn a given idea. Symbolized by a seal and ribbons, the "stamp of authority."

(4) *Plain folks* — attempting to convince one's public that one's ideas are good because they are those "of the people." Symbolized by the traditional analogue for an old friend, an old shoe.

(5) *Card-stacking* — the use of only such highly selected material, whether true or false, as supports one's case. Symbolized by the ace of spades, the card traditionally used to signify treachery.

(6) *Band wagon* — "Everybody's doing it," with the implication that we must therefore follow the crowd and "jump on the band wagon." Symbolized by a bandmaster's hat and baton, used on old-fashioned band wagons.

(Symbols and descriptions adapted from Alfred McClung Lee and Elizabeth Briant Lee, *The Fine Art of Propaganda*, New York, Harcourt, Brace & Company and the Institute for Propaganda Analysis, 1939, pp. 23–24. With permission of the authors and copyright owners.)

These symbols, while useful as pedagogical devices, have not been utilized in research, nor has their reliability or validity been established. To identify the symbols in a given propaganda document, the quantitative method of content analysis is helpful. See Harold D. Lasswell, Nathan Leites, and Associates, *The Language of Politics*, New York, George W. Stewart, Publisher, Inc., 1949.

gandized. For example, in sophisticated circles there is widespread distrust of exhortation and appeals to sentiment, and the propagandist who uses these methods in dealing with such groups may find that his efforts backfire. Another reason for the failure of propaganda is that different themes may be working at cross-purposes. When, during World War II, propaganda was released showing the cruelty and inhumanity of the Nazis, the effect was the one intended, namely, hatred toward the enemy, but this effect was offset because the accounts also unwittingly emphasized the power and efficiency of the Nazi war machine, and consequently led to fear and withdrawal.[30]

If the newer methods of content analysis are valid, they should be useful in spotting propaganda. Congress has passed legislation requiring that foreign agents register with the State Department, on the assumption that the public will be in a better position to detect and evaluate anti-democratic propaganda if the source is known. This is especially important in a democracy where anti-democratic statements are permitted. But how can you prove that any materials are propaganda? Among the tests used are (1) the explicit identification of the documents in question with one side of a controversy; (2) the similarity of the content, vocabulary, and style to the content, vocabulary, and style of known propaganda channels; and (3) the use of one party to a controversy as a source, without disclosure. Facts obtained by these and other methods have been admitted in evidence by federal courts and were a factor in the conviction of William Dudley Pelley for sedition.[31]

[30] Paul F. Lazarsfeld and Robert K. Merton, "Studies in Radio and Film Propaganda," *The New York Academy of Science*, Series II, Vol. 6, No. 2, December 1943.

[31] Harold D. Lasswell, Nathan Leites, and Associates, *The Language of Politics* (New York: George W. Stewart, Publisher, Inc., 1949), Chapter 9.

Propaganda has become a major social instrument. Propaganda has in modern times been lifted from its long-established place as a minor factor in social life to a new position as a major social force. This change has been made possible by the growth of the sciences of human relations, providing new knowledge of how to manipulate human beings; by the amazing development of communication facilities in modern times, including the telegraph, the oceanic cable, the telephone, the radio, television, the motion picture, facsimile transmission, teletype, the multigraph machine, rotary printing presses; by the highly efficient control and organization of the propaganda machinery now possible; and by the proliferation of interest groups in our time. Particularly in the totalitarian states do we see propaganda agencies established as vital adjuncts of the government, on equal terms with the other major departments of the state.

Propaganda in wartime. The use of the mass communication systems to produce mass suggestibility is especially effective during wartime, with its intense emotion, as shown by Merton[32] in his analysis of a World War II bond drive conducted by a famous radio star, Kate Smith. She spoke over the air for a minute or two at repeated intervals from eight o'clock one morning until two the next morning, and succeeded in getting 39 million dollars in pledges.

Propaganda is perhaps seen at its best in wartime, when even democratic states make it a major function. This can be shown in connection with the promotion of America's entrance into World War I, and her subsequent participation in the conflict. Previous to American participation in the war, a strong sentiment had developed in the United States against becoming involved in it. For example, in the late autumn of 1914, 367 newspaper proprietors were asked:

[32] Robert K. Merton, *Mass Persuasion* (New York: Harper & Brothers, 1946).

"Which side of the European struggle has your sympathies?" The replies of 242, or almost exactly two-thirds of the group, expressed no particular preference.[33] Woodrow Wilson was re-elected in 1916 on the slogan: "He kept us out of war."

A number of factors, however, were instrumental in drawing the United States into the conflict. Among the underlying causes may be mentioned the Anglo-Saxon basis of American civilization, which led quite naturally in time to increasing sympathy for the British rather than the German cause, the widespread indignation at the invasion of Belgium, the enormous stake of the financial interests in an Allied victory; shocking episodes, such as the sinking of the *Lusitania* and the threat of unrestricted submarine warfare; and the fear that if Germany won the war the United States would be invaded. But not to be discounted is the role of British propaganda from 1914 to 1917, when we finally entered. There is abundant evidence to show that during these three years the British were exceedingly busy creating a favorable public opinion by very subtle means.[34]

The Germans undertook a propaganda campaign, too, but their direct, open, obvious methods caused them to blunder badly and perhaps led them to do more harm than good to their cause. The British were far more subtle. They would not even admit that such a thing as British propaganda existed in the United States. Sir Gilbert Parker, upon being put in charge of the work, had a careful analysis made of American press opinion, and an equally thorough investigation of opinion in the colleges and universities. On the basis of these studies and a careful selection from *Who's Who,* a mailing list was prepared of thousands of persons to whom the propaganda was sent. The literature was always sent out with a personal card, and with no indication of official sponsorship, thus giving the impression that here was a prosperous, kindly, social-minded Englishman who wanted to do his duty by his American friends. Whenever literature written by Americans was available, it was utilized. The British resorted not to violent wooing as the Germans had done but to gentle, personal appeals.

With war finally declared against Germany, it was necessary to build up a solid favorable public opinion toward the war. An agency called the Committee on Public



81 Propaganda used in World War I was more emotional than that used in World War II. Why so?

[33] *Literary Digest,* 49: 939, November 14, 1914.

[34] J. D. Squires, *British Propaganda at Home and in the United States from 1914 to 1917* (Cambridge, Mass.: Harvard University Press, 1935).

ТОВАРИЩИ ПИЛОТЫ!

Если вы любите свободу...

Если у вас есть смелость...

Если вы хотите начать новую, лучшую жизнь, то...

Вот Ваша Возможность!

Избавтесь от Коммунистического Ига!

Летите на Своем Реактивном Самолете к Свободному Миру!

Свобода и Вознаграждение Ждут Вас Впереди!

Товарищи лётчики!

Дальневосточное Командование предлагает свою помощь всем смелым лётчикам, желающим освободиться от коммунистического ига и начать новую, лучшую жизнь, с должным почётом в свободном мире. Товарищи! Генерал Марк В. Кларк, Главнокомандующий Вооружёнными Силами на Дальнем Востоке, гарантирует вам убежище, защиту, человеческую заботу и внимание. Вам дана полная гарантия в том, что ваши имена останутся в тайне, если вы того пожелаете. Помимо этого, каждый лётчик, который благополучно посадит на нашей территории современный реактивный самолёт в боевой готовности, получит в награду 50,000 американских долларов. Первый лётчик прилетевший в Южную Корею и доставивший такой реактивный самолёт Вооружённым Силам Об'единённых Наций, получит в награду добавочную сумму в 50,000 американских долларов за свой героизм.



Это фотокарточка молодого лейтенанта Польского Воздушного Флота, который пилотел на МИГ-15, реактивном самолете Советского производства из-за Железного Занавеса 5 марта этого года и благополучно совершил посадку в Дании на острове Борнхольм. Он получил политическое убежище и живет сейчас комфортабельной жизнью в Англии.

ИНСТРУКЦИИ, КОТОРЫЕ УКАЖУТ ВАМ ПУТЬ К СВОБОДЕ, ДАНЫ В ПИСЬМЕ НА ОБРАТНОЙ СТОРОНЕ ЛИСТОВКИ. ПРОЧТИТЕ ИНСТРУКЦИИ И СЛЕДУЯ ИНСТРУКЦИЯМ ЛЕТИТЕ К СВОБОДЕ!

5701

Translation in part: Comrades Pilots! If you like freedom . . . If you are courageous . . . If you want to begin a new and better life . . . This is your opportunity! Get out from under the Communist yoke! Fly your jet aircraft to the free world! Freedom and rewards await you!

". . . General Mark W. Clark . . . guarantees you asylum, protection, humane treatment and care. You are fully guaranteed that your names will remain secret if you so desire. Besides that, each pilot who delivers a modern, operational, combat-type jet aircraft in flyable condition to our territory will receive a reward of 50,000 U.S. dollars. The first pilot who flies to freedom and delivers such a jet aircraft to the U.N. force will receive an additional bonus of 50,000 U.S. dollars for his bravery. . . ."

Information was established by our government. The Committee set out to build up love and hate attitudes — love toward the Allies and hate for the Germans.[35] These goals were achieved by the constant use of emotionalized words and symbols. The Germans were called "Huns," the Kaiser was "the mad dog." The usual atrocity stories were circulated. We were told that the Germans were entirely responsible for the war. On our side there was nothing but great virtue; we were fighting "to make the world safe for democracy."

Changes in propaganda techniques in World War II. In World War II, an Office of War Information was established with a program that dwarfed that of Dr. Creel's committee of the First World War. For just the single year, 1945, the budget called for 64 million dollars. The bulk of this money (more than 95 per cent) was spent for psychological warfare, i.e., propaganda in enemy, occupied, and neutral countries through the Overseas Branch of the O.W.I., and only relatively small amounts were spent by the Domestic Branch for propaganda at home. In World War II, because of the Japanese attack at Pearl Harbor and the aggressions of the Nazis, the American people needed no persuasion for their participation in the war; and the Domestic Branch of the O.W.I. became "principally a staff operation, responsible for the effective organization and coordination of other activities, both governmental and private."[36]

[35] H. D. Lasswell, *Propaganda Technique in the World War* (New York: P. Smith, 1938).

There were a number of differences between the propaganda of World War I and World War II. During the Second World War, propaganda tended to be less emotional and less moralistic. Atrocities were not played up, as they had been in the propaganda of World War I. There were fewer divergences from fact. This was mainly because the cult of credibility had spread, and there was more distrust of the propagandist who after the first war publicized his devious methods. It should be pointed out that these remarks apply to the propaganda of the Western democracies more than to that of Germany and Russia.

A cold war emphasizes propaganda. If there are no shooting or limited wars, the contest between rival military powers depends more on means other than the use of weapons. Thus a further expansion of propaganda as an established instrument of policy in foreign affairs resulted from the expansion of the U.S.S.R. after World War II. The Marshall Plan, the Point Four program, the exchange of educational personnel, and similar programs became indirect propaganda weapons which were coupled with a direct propaganda offensive. The principal agency, the O.I.I. (Office of International Information) was appropriated 79 million dollars in 1950, a sum larger than that indicated above for the wartime year 1945; and late in 1955 it was announced that the bud-

[36] *Hearings* (Before the Subcommittee of the Committee on Appropriations, House of Representatives, 78th Congress, 2nd Session) *on the National War Agencies Appropriation Bill for 1945.* Part 2. (Washington, D.C.: Government Printing Office, 1944).

82 An Example of Effective Psychological Warfare

During the Korean War, the leaflet shown on the opposite page was dropped behind enemy lines, offering $100,000 reward to the first pilot to fly an MIG to an allied base, $50,000 to all others. For eight days following the release of the pamphlet, all enemy bombers were grounded while presumably the enemy high command conducted loyalty checks. When bombing missions were resumed, sorties were reduced by 20 per cent and a great reduction in effectiveness was noted, suggestion that many experienced foreign pilots had been withdrawn. (Data supplied by Major John A. Sirney, Air University, Maxwell Air Force Base, Alabama; photostat through the courtesy of the United States Air Force.)

get would be increased to $130 millions.[37] This Office maintains approximately 150 United States Information Service centers overseas. Its principal direct propaganda weapon is the "Voice of America," which around the clock sends messages in many languages to all parts of the world where the United States has strategic interests. To cope with the problem of bringing a message without being subject either to radio jamming or a source of electricity, a little hand-operated phonograph which can be manufactured for 50 cents or less has been developed. The plan is to drop the little machine by air behind the Iron or Bamboo Curtain.[38]

Conversion of publics into crowds. Publics are capable of rationality, but under the influence of propaganda, publics may readily become as emotional as crowds. Indeed, when an interest group abandons processes of deliberation and discussion and gives way to emotion, it ceases to be a public and becomes a crowd. In the graphic words of Mark Twain, this is the way war hysteria develops:

> The loud little handful — as usual — will shout for the war. The pulpit will, warily and cautiously, object — at first; the great, big, dull bulk of the nation will rub its sleepy eyes and try to make out why there should be a war, and will say, earnestly and indignantly, "It is unjust and dishonorable, and there is no necessity for it."
>
> Then the handful will shout louder. A few fair men on the other side will argue and reason against the war with speech and pen, and at first will have a hearing and be applauded; but it will not last long; those others will outshout them, and presently the anti-war audiences will thin out and lose popularity.
>
> Before long you will see this curious thing: the speakers stoned from the platform and free speech strangled by the hordes of furious men who in their secret hearts are still at one with those stoned speakers — as earlier — but do not dare to say so.
>
> And now the whole nation — pulpit and all — will take up the war cry, and shout itself hoarse, and mob any honest man who ventures to open his mouth; and presently such mouths will cease to open.
>
> Next the statesmen will invent cheap lies, putting the blame upon the nation that is attacked, and every man will be glad of those conscience-soothing falsities, and will diligently study them; and refuse to examine any refutations of them; and thus he will by and by convince himself that the war is just, and will thank God for the better sleep he enjoys after this process of grotesque self-deception.[39]

Does a cold war also turn us into a crowd? In the years following World War II in the United States, several hundred persons in government service were charged with being either a loyalty or security risk, and suspended without pay.[40] Written charges were preferred against them and hearings held, but the government file — on the basis of which the charges were founded — was not released to the employee or his attorney. The accused was thus not able to identify the source of the charges or to interrogate the accusers. The government's position was that to divulge the sources would be to violate the confidence of the informants and to discourage potential informants. This, however, represented a reversal of traditional American principles, namely, that a man is deemed innocent until proved guilty, and has the right to confront his accusers.

[37] *Tampa Tribune,* December 17, 1955. Drew Pearson quotes President Eisenhower as saying: "The most important battle coming up is the battle for men's minds."

[38] *New York Times,* November 11, 1955.

[39] Mark Twain, *The Mysterious Stranger.* Cited in *The New Republic,* 84: 259, October 16, 1935. Reprinted by permission of Harper and Brothers.

[40] *Case Studies in Personnel Security,* collected under the direction of Adam Yarmolinsky (Washington, D.C.: The Bureau of National Affairs, August 1955).

Censorship and responsibility . . .

I want to talk about our common responsibilities in the face of a common challenge. The events of recent weeks may have helped illumine that challenge for some; but the dimensions of its threat have long loomed this large on our horizon. Whatever our hopes may be for the future — for reducing this threat or living with it — there is no escaping either the gravity or the totality of its challenge to our security and survival — a challenge that confronts us in unaccustomed ways in every sphere of human activity.

This deadly challenge imposes upon our society two requirements of direct concern to both the press and the President — two requirements that may seem almost contradictory in tone, but which must be reconciled and fulfilled if we are to meet this national peril. I refer, first, to the need for far greater public information, and, second, to the need for far greater official secrecy.

The very word "secrecy" is repugnant in a free and open republic; and we are as a people inherently and historically opposed to secret societies, to secret oaths, and to secret proceedings. We decided long ago that the dangers of excessive and unwarranted concealment of pertinent facts far outweighed the dangers which are cited to justify it.

Even today, there is little value in opposing the threat of a closed society by imitating its arbitrary restrictions. Even today, there is little value in insuring the survival of our nation if our traditions do not survive with it. And there is very grave danger that an announced need for increased security will be seized upon by those anxious to expand its meaning to the very limits of official censorship and concealment.

That I do not intend to permit. And no official of my Administration, whether his rank is high or low, civilian or military, should interpret my words here tonight as an excuse to censor the news, to stifle dissent, to cover up our mistakes or to withhold from the press and the public the facts they deserve to know.

But I do ask every publisher, every editor and every newsman in the nation to reexamine his own standards, and to recognize the nature of our country's peril. In time of war, the Government and the press have customarily joined in an effort, based largely on self-discipline, to prevent unauthorized disclosures to the enemy. In time of clear and present danger, the courts have held that even the privileged rights of the First Amendment must yield to the public's need for national security.

Today no war has been declared — and however fierce the struggle, it may never be declared in traditional fashion. Our way of life is under attack. Those who make themselves our enemy are advancing around the globe. The survival of our friends is in danger. And yet no war has been declared, no borders have been crossed, no missiles have been fired.

If the press is awaiting a declaration of war before it imposes the self-discipline of combat conditions, then I can only say that no war ever posed a greater threat to our security. If you are awaiting a finding of "clear and present danger," then I can only say that the danger has never been more clear and its presence has never been more imminent.

It requires a change in outlook, a change in tactics, a change in missions — by the Government, by the people, by every business man, union leader, and newspaper.

83 The Dilemma of Freedom Versus Security in a Cold War

We recognize that our traditional freedom of the press requires free access to the news. In time of war, freedom of the press is curtailed and sometimes suspended. But a cold war, as President Kennedy points out, poses a difficult problem. What is to be our policy when our national security is threatened by a totalitarian enemy who does not openly declare war upon us and is not limited by the freedom we enjoy? (A portion of an address to the American Newspaper Publishers' Association in the Waldorf-Astoria Hotel, New York, April 27, 1961).

In some instances the hearings led to reinstatement with back pay. There were often long delays in getting a hearing, or a verdict after the hearing, during which time the workers had great difficulty in finding other employment. There was the expense of litigation. When the Fund for the Republic, Inc., provided money for a study of the security programs and other issues involving civil liberties, the Ford Motor Company, which had endowed the Fund but was not otherwise responsible, became in some regions the target of a boycott of its products, after which the head of the company issued a statement critical of the activities of the Fund.

The effect of these developments was widespread paralyzing fear among government workers and others lest some comment or act or affiliation be construed as disloyal. There was a reluctance to discuss public issues publicly or to join new organizations. Individuals with liberal sentiments who had joined organizations in the 1930's and 1940's which they believed served humanitarian ideals, only to find that they were later placed on the Attorney General's list of subversive organizations, were accused of guilt by association, although in a large heterogeneous society it is very difficult for the individual to keep in close touch with all the activities of all the organizations with which he is affiliated.

The causes of the mass fear and the curtailment of freedom and civil liberties were in part related to the cold war which, in the demands it makes on the citizenry, closely resembles a hot war, except for the lack of bloodshed. They were also influenced by conditions peculiar to the United States, for in England civil liberties were given more protection, despite the greater vulnerability of the British Isles to the dangers of war.

Limits to propaganda. Propagandists boast that they can get people to believe that white is black and black white. Are there no limits to what they can accomplish? The evidence would rather tend to show that such claims of propagandists are excessive and that there are limits to what can be done. One close student of propaganda reports there is evidence to show that significant changes in behavior as a result of campaigns by organizations are rare.[41] The effectiveness of propaganda is, for instance, definitely limited by a knowledge of the facts in the case, if the effect the propagandist seeks is contrary to the facts.

In an experiment at the University of Iowa,[42] 203 students were exposed to propaganda concerning Mr. W. Morris Hughes, Prime Minister of Australia from 1915 to 1923. An Information Check Test given at the outset showed that the students knew nothing about him. Planted editorials were then substituted without the students' knowledge for editorials of the same length appearing in current issues of the student daily newspaper. Thirty editorials were constructed, one half favorable to Mr. Hughes and the other half unfavorable. Of the subjects reading favorable editorials, 98 per cent became favorably biased toward Mr. Hughes, while 86 per cent of the subjects reading unfavorable editorials became adversely biased. It is safe to say that no such extensive conversions would have taken place if the students had known about Mr. Hughes and his administration. Hence, it follows that knowledge of the facts about society learned by the student of sociology serves somewhat as a breakwater against the waves of propaganda on social questions that beat against him.

[41] Dorwin Cartwright, "Some Principles of Mass Persuasion," in Daniel Katz *et al.* (eds.), *Public Opinion and Propaganda* (New York: The Dryden Press, 1954), p. 383.

[42] A. D. Annis and N. C. Meier, "The Induction of Opinion Through Suggestion by Means of Planted Content," *Journal of Social Psychology*, 5: 65–81, February 1934.

A second point is that the effectiveness of propaganda is limited by prevailing interests, prejudices, and social trends. Propaganda is more likely to succeed when it flows with the current than against it, and doubtless propaganda is often given credit for results that would have come about in any case from the operation of larger social forces. Thus, many American historians believe that slavery was on its way out because it was ill-adapted to the newly evolving industrial society, and would have disappeared without benefit of William Lloyd Garrison and *Uncle Tom's Cabin,* although these no doubt hastened the process.[43]

Strong propaganda may prevail for a time against current social trends, but it is doubtful if it can maintain this advantage for long. An illuminating example is the experience of the Anti-Saloon League in its campaign against liquor. The drys prevailed at first partly because of their strenuous, persistent crusade and partly because they were supported by favorable social situations, such as the generally recognized menace of the saloon, the need for conserving food resources during the war, so that the use of foodstuffs in manufacturing liquor was decried, and the union of the liquor traffic with German interests. We cannot say that national prohibition would have come without the Anti-Saloon League, but certainly the social situation was favorable too.

More important, however, is the fact that the Prohibition Amendment was later repealed, and only partly on account of the efforts of the Committee Against the Eighteenth Amendment. Prohibition was abolished because it brought in organized racketeering and bootlegging; its administration proved to be exceedingly expensive and ineffective; and it helped to generate widespread disrespect for law. There were many other reasons why prohibition failed, but the heart of the matter is that it ran counter to modern trends; it is impossible to regulate personal habits successfully by law in a complex, rapidly changing, urban civilization.

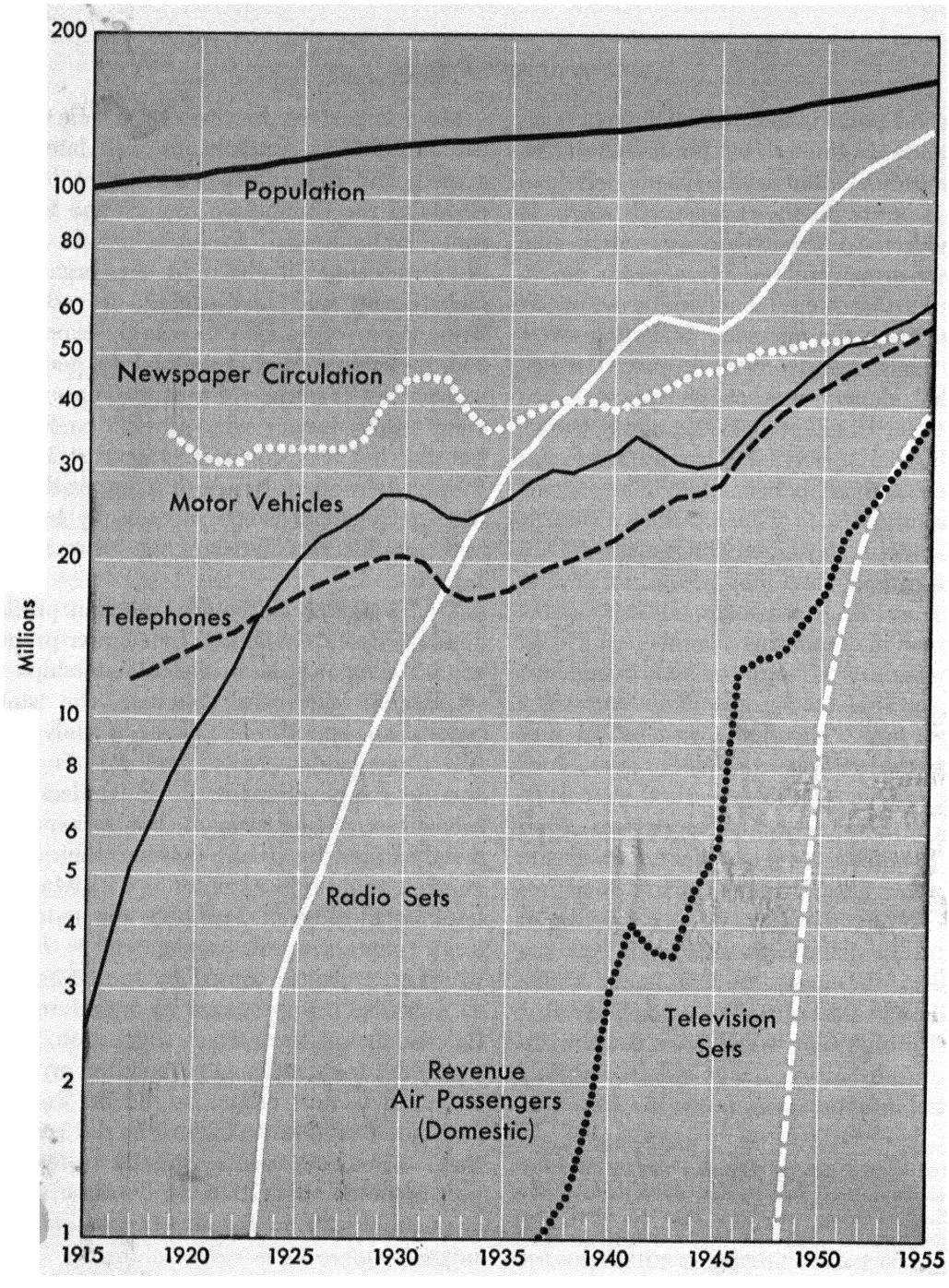
Finally, it may be pointed out that propaganda is definitely limited by counter-propaganda. Propaganda in the dictatorships is so largely successful because the state brooks no opposition. There is only one real propaganda agency, and that is managed by the government. Soviet leaders take account of public opinion, but rather than merely following public opinion, their chief aim is to mold it in accordance with Marxist-Leninist ideology.[44] Probably the most extreme expression of propaganda is *brainwashing,* a phrase coined by the Chinese[45] to describe the conquest of men's minds. By means of protracted suggestion, they succeed, for example, in persuading an individual to confess crimes he did not commit and in getting him to believe he did commit them. The experience greatly resembles post-hypnotic suggestion, an outcome which is possible only in the absence of counter-suggestion.

In a democratic country like the United States, however, the political public may be exposed to divergent suggestions and so

[43] Another illustration is Allied propaganda, which is credited with breaking German morale in 1918. British shells carried leaflets ten miles behind the enemy lines. During each week of 1918, more than 2,000 propaganda balloons were released, each carrying 1,000 leaflets. In October 1918, 5,360,000 leaflets were dropped in Germany. — G. S. Viereck, *Spreading Germs of Hate* (New York: H. Liveright Company, 1930), p. 205. But Bruntz has shown that there were more important factors operating on German morale at the time. Civilian morale corresponded a good deal more closely to German military successes and failures and the stress of the food shortage. — G. G. Bruntz, "Allied Propaganda and the Collapse of German Morale in 1918," *Public Opinion Quarterly,* 2 (1): 64–65, January 1938.

[44] Alex Inkeles, *Public Opinion in Soviet Russia* (Cambridge, Mass.: Harvard University Press, 1950), Introduction.

[45] Edward Hunter, *Brain-Washing in Red China* (New York: The Vanguard Press, 1953).



84 The Contact Inventions

The new inventions of transportation and communication, and their rapid adoption, make possible a very large public — perhaps some day a world public. They also aid in the evolution of the size of states. The contact inventions help the slow process of democracy to keep up with the dizzy pace of social change, and they also provide excellent vehicles for propaganda. (The data for constructing this graph come chiefly from various editions of the *World Almanac* and the *Statistical Abstract of the United States.)*

have a chance to check them against one another. During the presidential contest of 1936, the newspapers of the country were largely opposed to President Roosevelt in his attempt to win a second term. They unloosed a torrent of propaganda against him. If his supporters had had access to no other means of reaching the public, the majority public opinion might have been different from what it later proved to be.[46]

But as President of the United States, Mr. Roosevelt had special access to the radio, an advantage which he strongly capitalized. In addition, he could bring his arguments directly to the people by means of a personal tour around the country. In this case, therefore, the public had the opportunity of comparing two rival sets of propaganda, and the effectiveness of the one was limited by the appeal of the other. But while there are limits to propaganda there are also dangers. The marvelous new communication inventions, such as printing, radio, television, and facsimile transmitting devices, make excellent opportunities for the propagandists. These inventions can, of course, be used for counter-propaganda, though they may not be so used.

Experimentation[47] has shown that the effectiveness of communication depends on (1) who said it (the speaker or writer); (2) what is said and how it is said (the message); and (3) to whom it is said (the audience). If the same message is ascribed to a high credibility source and a low credibility source, the former will have more effect than the latter, at least initially. The appeals which serve as incentives to acceptance of a message are substantiating arguments, rewards to be gained from compliance, and penalties resulting from non-compliance. If fear is used, to be successful the appeal must be explicit, based on prior experience of the audience; and it must arouse and then reduce emotional tension. In an experiment in which three different forms of illustrated lecture on dental hygiene were used, embodying three different intensities of fear appeal, the strongest appeal produced the greatest emotional tension, but the weakest appeal produced the greatest change in dental hygiene practice. The strong appeal did not provide the necessary reassurance.

As for the audience, different people react differently to the same message. Those who value their membership in the group most highly are the most subject to group pressure and the most resistant to counter-propaganda. This helps us to understand why certain American soldiers taken prisoner by the Communists in the Korean War and subjected to brain-washing became turncoats and why others did not. Actual participation in Communist propaganda programs probably intensified the conversion, for studies show that spoken agreement, when accompanied by role-playing, increases the effectiveness of persuasive communication.

[46] In the fifteen largest cities of the United States, newspapers controlling approximately 70 per cent of the total circulation were hostile to Franklin D. Roosevelt, whereas he received 69 per cent of the total vote. "The Press and the Public," *The New Republic,* 90: 178–191, March 17, 1937.

[47] Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, *Communication and Persuasion* (New Haven, Conn.: Yale University Press, 1953).

SUMMARY

Two polar types of collective behavior, that is, group behavior lacking formal organization and not following established tradition, are the crowd and the public. The crowd is unconventional because behavior is released from its usual inhibitions and is therefore emotional. The public is unconventional because it is confronted by an issue, a challenge to the established tradition, which is met by discussion. The polar types of crowd and public are therefore characterized by emotional and deliberative behavior, respectively.

The emotional behavior of individuals in a crowd, although constitutional in origin, is heightened by the power of suggestion which is particularly effective in congenial crowds because of the prestige of numbers, the influence of leaders who are greatly admired, and the repetitive and rhythmic nature of circular responses in the group. When emotion is extreme and the crowd gets out of hand and becomes aggressive, the group is identified as a mob. At the other pole are the more stable groups called publics, characterized by discussion of issues confronting the group. At the extreme of the continuum marked by rational discussion would be, for example, groups or publics of scientists with a common interest in scientific issues. In between the extremes are groups characterized by degrees of emotion and rationality.

Public opinion is rational when both sides of controversial issues are considered in the process of arriving at decisions. There are, however, numerous organized groups with axes to grind, or causes to promote, or vested interests to maintain which resort to propaganda to win uncritical acceptance of their cause. By means of propaganda large sections of the public may be induced to behave in ways which are actually contrary to their own interests. Protection against propaganda is afforded by knowledge, by counter-propaganda, and by an awareness of the propaganda process itself.

QUESTIONS FOR DISCUSSION

1. How do the group and culture affect crowd behavior?
2. Why is there so little scientific literature on crowds?
3. Is collective behavior a useful concept? What are its limitations?
4. Why does the individual feel secure in the crowd?
5. In what respects does a public differ from a crowd?
6. How may publics, under the influence of propaganda, become crowds? Illustrate.
7. What are pressure groups? Why are they so numerous in our time?
8. Why has propaganda become a major social instrument?
9. How would you distinguish propaganda from education? From advertising?
10. Under what conditions is propaganda most effective? Least effective?
11. Is the boast of propagandists that they can make us believe black is white, and white black, a valid one? Are there limits to the power of propaganda?

TOPICS FOR REPORTS

1. An analysis of an instance of crowd behavior on a college campus.
2. A survey of important issues on a college campus.
3. Scientific and unscientific methods of sampling public opinion.
4. International propaganda.
5. Brain-washing.
6. Propaganda in present-day secondary school textbooks.
7. Public opinion management in a present-day totalitarian state.

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9

Social Control and Conformity

If you were to show up in public bareheaded in Danbury, Connecticut, you would probably be quickly identified as an outlander. And if you were an outlander with something to sell, the surest way of not making a sale would be to call on a customer without wearing a hat. In many of Danbury's places of business, signs have been displayed reading: "Our buyers have been instructed not to give interviews to hatless salesmen. It is to your own advantage to wear a hat." The explanation for this behavior is that Danbury, since the latter part of the eighteenth century, has been the hat center of the world. And Danbury has become alarmed by the trend toward hatlessness. As a means of drawing attention to the problem, the community's Exchange Club hit upon the idea of having its members wear all-red or all-green hats instead of the usual run-of-the-mill colors. If a member appeared without a hat at the weekly dinner meeting, he was required to wear a dunce cap throughout the program. It is reported that after the first couple of meetings, no one came without a hat.[1]

There may be more important social issues than whether or not one should wear a hat, although from Danbury's standpoint the issue is scarcely a minor one. In any case, the illustration points up the interest of the group in what is regarded as appropriate behavior and the concurrent tendency of the group to bring pressure to bear upon those members who do not conform to the established norms. This pressure is identified as *social control.*

[1] *New York Times,* January 30, 1949.

THE NATURE OF SOCIAL CONTROL

Some students of sociology use the term *social control* in a very general or inclusive sense to describe whatever means are employed by the group to achieve social order. In this usage, the folkways and division of labor, for example, would be regarded as means of social control, since they help to integrate and stabilize the group. In the present chapter, a different and more limited concept of social control is employed, namely, the processes and means whereby deviations from social norms are limited by the group. Accordingly the folkways in general are not means of social control; but a particular folkway like ridicule is a means of social control if in a given society, as among the Eskimo, it is used in the effort to bring wayward members of the group back into line.

The human group is generally a conservative force. In the non-human animal world the more aggressive and powerful animal does not respect the rights of the weaker. If a bigger and stronger dog tries to take a bone away from a smaller one, other dogs will not intercede to prevent it. But the appropriation by one human being

of possessions that belong to another human being who is a member of the same group is almost universally condemned, as in the commandment, "Thou shalt not steal." Stealing from strangers or from the enemy may be permitted, even lauded, but seldom stealing from a group associate. The reason is that we greatly value group life because of the many advantages and satisfactions it provides. Stealing from a member of the group disturbs the unity and tranquillity of the group, hence cannot be countenanced.[2] The human group is therefore a kind of defense against the more assertive and pugnacious and irregular members.

The taboo against stealing is only one of innumerable group norms which are integrating factors if there is conformity. Nonconformity threatens the integration of the group, hence the group acts to bring nonconformists into line.

The idea of the group as shaping the conduct of its members carries with it the implication of group pressure. The group not only molds behavior, but it also restrains and disciplines. To Durkheim the essence of group life is that it exercises constraint or coercive power upon the individual,[3] and thereby acts as a conservative force limiting variations. This point is so vividly portrayed in Sinclair Lewis' novel, *Main Street*, that the phrase, "Main Street," has come to be practically synonymous with "social pressure." In the story, a city girl, Carol Kennicott, marries a small town doctor. It is her first experience of living in a small community, and she quickly becomes the object of intense group disapproval when she ignores established conventions and, in addition, attempts in a naive way to set up a reform movement to make the town more beautiful. Incidentally, we are told that Carol had taken some courses in sociology at the university before her marriage, in which case, perhaps, the courses failed to include anything on the topic of social control. This phenomenon is far too significant for students of sociology to ignore.

There is considerable evidence that social pressure operates to reduce variations from the average. Allport[4] had seventeen subjects rate five series of ten different odors with respect to the degree of their pleasantness or unpleasantness. The judgments were rendered both in and apart from the group. In the group, the unpleasant odors were judged to be less unpleasant and the pleasant odors less pleasant. The effect of the group was thus to cut off extreme judgments, suggesting that the group exerts a restraining or conservative influence on human behavior. It will be observed in this case that the judgment of the other members of the group was not a factor, inasmuch as these judgments were not announced. The pressure would therefore seem to be purely that of the group as such.

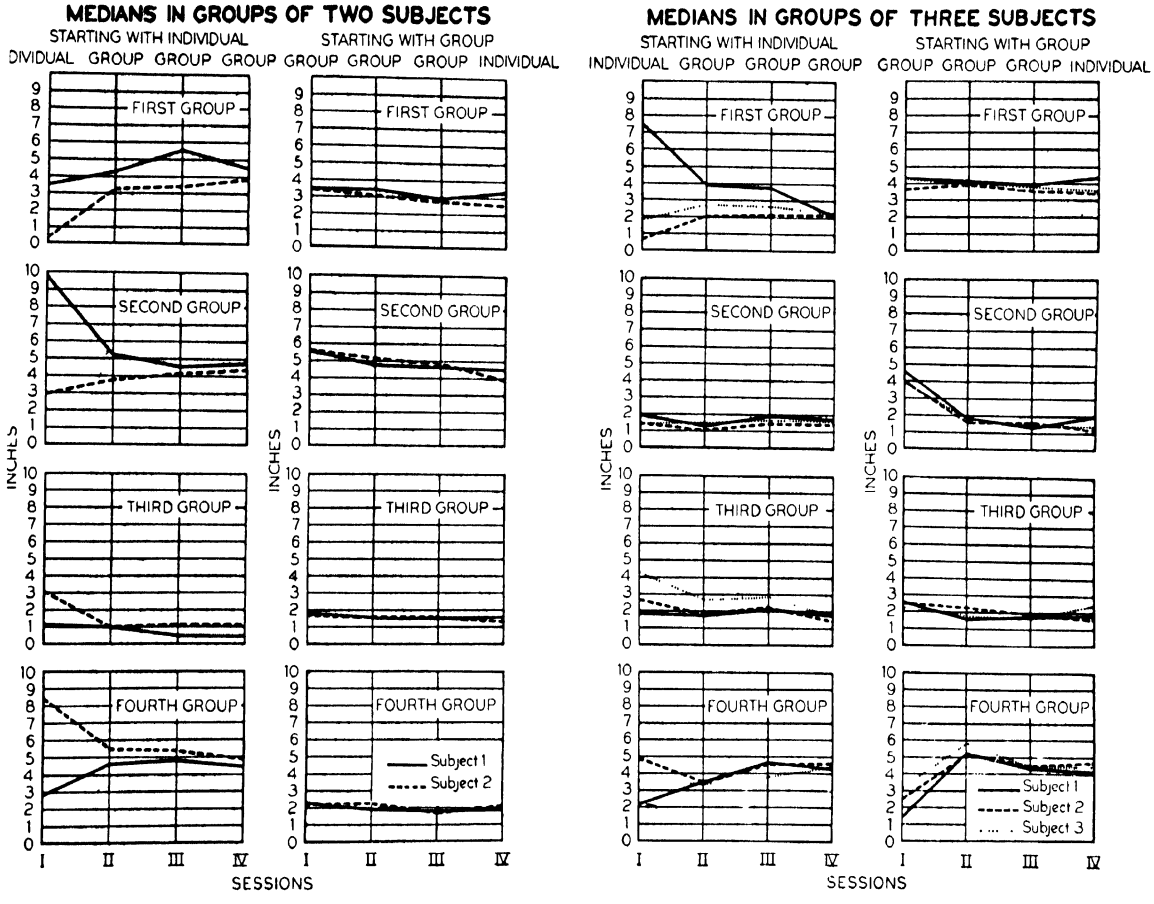
If, however, the members of the group hold decided views on a question and these views are known, then the effect is to encourage conformity to the group opinion. Thus Moore[5] asked 95 subjects to make judgments in the fields of morals by indicating which of two ethical choices they regarded as less offensive; for example, disloyalty to friends or cheating on examina-

[2] Occasionally stealing is institutionalized, as it was in Sparta, where boys were deprived of food so that they would have to steal it. Stealing without getting caught was the goal and was part of the discipline and training of a warrior.

[3] Émile Durkheim, *The Rules of Sociological Method* (Chicago: The University of Chicago Press, 1938).

[4] F. H. Allport, *Social Psychology* (Boston: Houghton Mifflin Company, 1924), pp 274–278. Allport found also that in estimating weights, extreme judgments were avoided in groups.

[5] H. T. Moore, "The Comparative Influence of Majority and Expert Opinion," *American Journal of Psychology*, 32: 16–20, January 1921; see also D. Wheeler and H. Jordan, "Change of Individual Opinion to Accord with Group Opinion," *Journal of Abnormal and Social Psychology*, 24: 203–206, July–September 1929.



58 The Influence of the Group on the Formation of Norms

In an experiment, Sherif exposed subjects to a stationary pinpoint of light in a dark room. They were told that the light would move and were asked to estimate how much it moved. The first subject thought it moved 3.5 inches, a median of several trials, as shown in the top left corner rectangle of the chart where the solid line touches the outer edge. The second subject, shown by the dotted line, thought it moved .3 of an inch. When next tested in group trials, their estimates were closer together, as shown by the points where the lines cut the three verticals to the right in the rectangle. These norms set by groups persisted. When these subjects were first tested three times in group trials and once later as individuals, as shown in the rectangle at the top of the chart (second from the left), the medians were close together and persisted even when the subjects were tested individually. When three subjects were tested, as shown in the two top rectangles to the right, the results were much the same. The remaining twelve rectangles are repetitions and serve to increase the size of the sample. The experiment showed that the group was clearly a force making for conformity and limiting variation. (From Muzafer Sherif and Carolyn W. Sherif, *An Outline of Social Psychology*, revised edition, New York, Harper & Brothers, 1956, pp. 258–59.)

tions. When all the replies were in, the subjects were informed of the majority opinion, then retested. There was a swing away from the original answers. The effect of announcing the majority opinion was to bring about a greater degree of conformity to it, although whether this change was due to imitation rather than to social pressure is not clear. In any case it is concluded that the influence of the group makes for conventional or conservative behavior on the part of the individual.

The pressure toward conformity is in terms of the prevailing norms. Some norms, like the taboos against stealing and killing within the group, are almost essential to organized group life and therefore are highly durable. Other norms change from time to time, like the ideas about the proper costume for women to wear at the seashore. If there is a change in government and in the social system, as in revolutions, there may be drastic changes in the norms in certain areas. During the regime of Juan D. Perón in Argentina, the powerful independent newspaper, *La Prensa,* was seized and turned over to the General Confederation of Labor, which was beholden to Perón. What could be printed at the time was then rigorously controlled. The editor, Gainza Paz, whose family had founded the paper in 1869, fled to Uruguay and later to New York. With the deposition of Perón in 1955, Paz was invited back to his homeland and his paper was returned to him. The norm of an independent newspaper had been restored.

Overt conformity is the goal of social pressure. During Perón's regime, there were many citizens of Argentina who did not subscribe to his policies but who lacked the power to resist them successfully. Most of these individuals conformed outwardly. There are thus in conformity two factors which may or may not be consistent: compliance and conviction. Most compliance is associated with conviction, since members of a group are generally persuaded of the rightness of their way of doing things. But there is a great deal of overt conformity without conviction, especially on the part of newcomers to a group. When in Rome it is prudent to do as the Romans do. Northern students attending Southern schools may conform to the etiquette of race relations existing in the South, although they do not approve of the customs of segregation. Conformity without conviction occurs when the individual cannot withdraw from the group or values his membership in the group and does not wish to offend or is afraid of the consequences of nonconformity. Another example is the worker in an industrial plant who slows down his production because of correctives applied by fellow workers but who doubles his rate when the correctives are removed.[6]

Those who are responsible for the operation of a group prefer that kind of obedience to the norms which results from the group's being persuaded that the norms are correct. The army wants its soldier to believe in the rightness of the war it is fighting and tries to indoctrinate its fighters accordingly. But whether there is conviction or not on the soldier's part, the minimum requirement is loyalty to the group and obedience to its commander.

The group cuts off extreme variations. Group norms are group standards which the members are encouraged to emulate. But there is in every group, even in so-called utopias, some deviation from the norms. If the deviation is slight, the group — or the agencies empowered by the group to maintain social control — may ignore it or invoke only light sanctions. For example, in the United States despite the injunction "Thou shalt not steal," it is generally ac-

[6] Leon Festinger, "An Analysis of Compliant Behavior," in Muzafer Sherif and M. O. Wilson (eds.), *Group Relations at the Crossroads* (New York: Harper & Brothers, 1953).

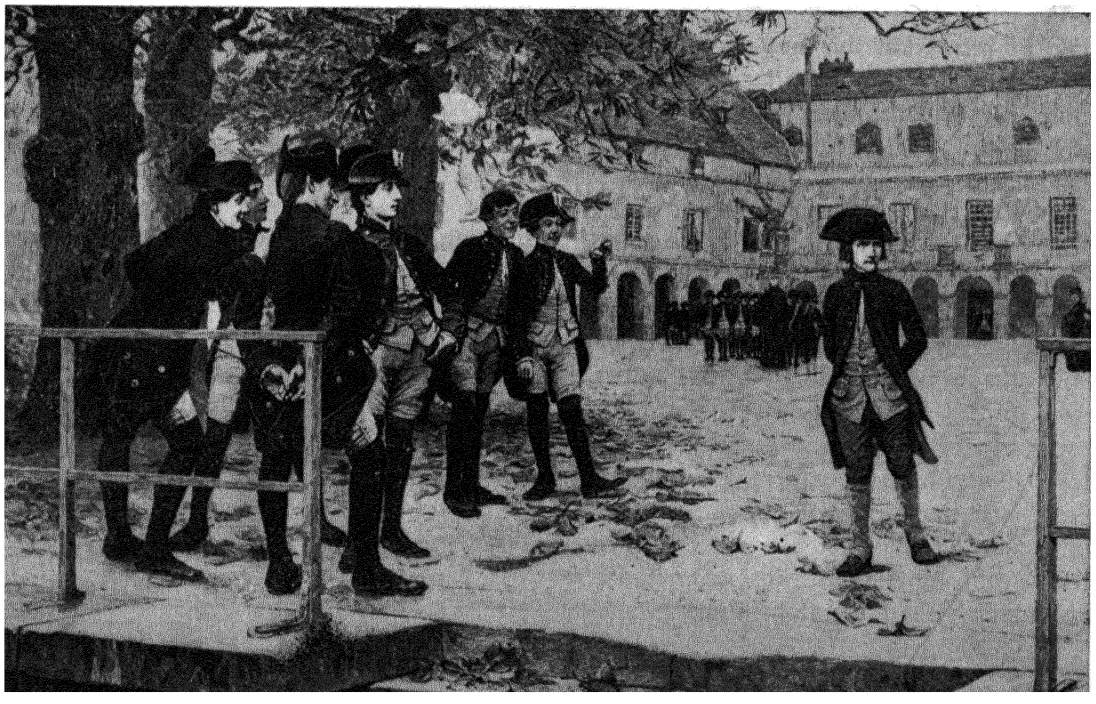
knowledged that there is widespread cheating in the matter of paying income taxes. Most of the delinquency consists of the under-reporting of incomes by small amounts. When an audit of a taxpayer's account shows such a delinquency, he is required to pay the amount due plus a fine of 6 per cent for the period the tax was unpaid. The penalty is relatively light. But if the amounts unreported are large, and there is proof of intention to defraud, the penalty is likely to be more severe, including a jail sentence. Income tax evasion is regarded as an offense against the government, but there are more serious offenses against the government. In the middle 1950's in the United States, being a leader of the Communist Party was such an offense, since the Communists advocated the overthrow of the free enterprise system by force if necessary. And more serious still is the crime of treason, for which the penalty is death. In a word, as the deviation from the norm becomes greater, the more serious becomes the offense in the eyes of the group and the more severe becomes the penalty. Since the seriousness is culturally defined, there is a fairly consistent and stable hierarchy of offenses in terms of seriousness in the minds of most members of a society.[7]

Group pressure resembles environmental pressure in cutting off extreme types. Something of the nature of group pressure can be learned from observation of the pressure of natural environment, which is an

[7] Arnold M. Rose and Arthur E. Prell, "Does the Punishment Fit the Crime?" *American Journal of Sociology,* 61: 247–259, November 1955.

86 A Study in Group Pressure

This painting shows Napoleon as a youth at military school, shunned by his classmates because of his arrogance, which was probably related to his sensitivity about his short stature. Napoleon's drive for personal power is thought to have been a reaction to such group pressures. The group is a conservative force which tends to cut off extreme variations. (Engraved by Henry Wolf, from a painting by Realier-Dumas.)



impersonal force operating on animals and plants. This impersonal force is the means by which the environment selects for survival some of the variations in a species. Those that are not selected for survival are, apparently, the extreme variations. This is illustrated by an incident in which several hundred sparrows were washed out of their nests by a heavy storm. They were picked up by a naturalist [8] who weighed them and measured their wing stretch. Those that were revived represented largely the middle group. Those that were very big and those that were very small perished. Among human beings, it has been shown that giants have a life expectancy one-half that of normal men.[9] Environmental pressure, then, seems to cut off the extremes. This is probably the reason why the distribution of nearly all living phenomena conforms to a curve shaped like a bell, with many items near the average and few at either extreme.

In the case of height and weight, it will be observed that nature cuts off extreme variations in both directions, that is, the very tall and the very short, the very heavy and the very light. With regard to other traits, like intelligence, eyes, and teeth, selection is from only one end of the curve. The feeble-minded child has a difficult time competing in primitive society, as does the hunter with poor vision, whereas the individuals with high intelligence and superior vision are favored. They are more likely to survive and pass their traits on to posterity, which helps to explain why today we generally have such a favorable inheritance as good eyes.

The cultural patterning of group pressure. Group pressure in human societies resembles environmental pressure in cutting off extreme deviates; but the two sets of phenomena are not identical in their operation, because human groups are cultural groups in which the group pressure operates through the prevailing norms. The Spartans killed shortly after birth those infants that were adjudged to be physically defective. Hence the Spartan culture resembled environmental pressure in this regard. But most cultures, especially modern ones, do not have such Spartan values. On the contrary, with their humanitarian values they tend to protect the weak and the infirm, although they do not value them most highly. There are some nonliterate societies that favor obesity, especially in their women; and the belle of the village is the heaviest female. Again, in Figure 88 there is a picture of a Trobriand albino, an extreme physical variation which is not well adapted to the environment and which would therefore tend to die off. But the Trobriand albino is protected by the group from his maladjustment to the tropical sun.

[8] H. C. Bumpus, "The Elimination of the Unfit," in *Biological Lectures* (Boston: The Marine Biological Laboratory, 1899), pp. 209–226.

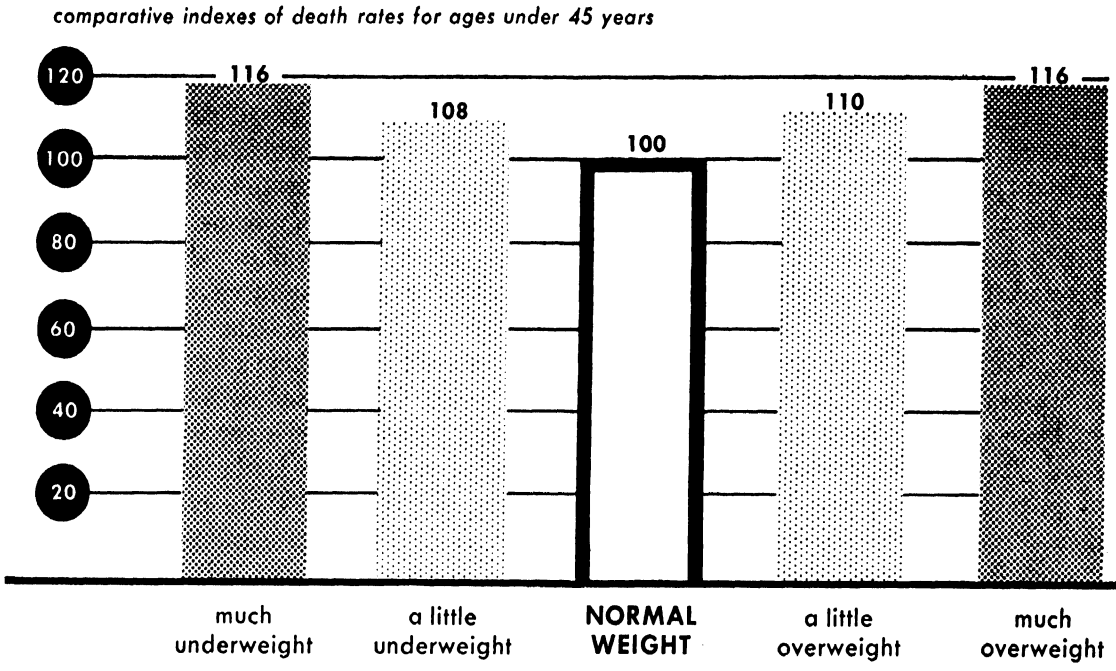
[9] Metropolitan Life Insurance Company, *Statistical Bulletin*, 18: 1, July 1937.

The Limits of Tolerance

It has been noted that there is in every group some deviation from the established norms. It is recognized that the norms are standards which may be difficult to realize in practice with complete infallibility. If men were naturally and forever perfect, there would be no need for the incentives that the norms provide. We say to err is human. The group generally recognizes this fact and permits some deviation from the norms, under certain conditions.

The limits of group tolerance of nonconformity are flexible and depend on three sets of factors: (a) the nature of the social situation; (b) the status and reputation of the individual; and (c) the type of behavior involved.

The social tradition. Since conformity is in terms of the norms of the society, the prevailing tradition is a crucial factor in



MARTYRS

Saint Peter
Saint Matthew
Polycarpus
Fabian
Alban
Saint Vincent
Basil
Boniface
Winceslaus
Stanislaus
John Huss
John Clark
Anne Askew
Francis Gamba

CRIMINALS

William Ireland
Cesar Borgia
Francois Villon
Sir Henry Morgan
Jonathan Wild
Dr. William Dodd
Count Cagliostro
Gilderoy
Barry Lyndon
Mary Young
Griffiths Wainewright
"Sir Roger Tichborne"
Charles Peace
Slade

87 Group Pressure and Natural Environmental Pressure

In the case of weight, environment eliminates the extreme types in both directions. To be like the average affords the best chance of survival. Does the group also cut off deviations from type in both directions? As a rule, no, since the group rewards those who support its norms, as well as punishing those who are in opposition. From the lists above it seems that society may kill its saviors as well as its criminals, but at the time of their death these martyrs were adjudged to be criminals and only later, by a different group, were they acclaimed as saviors. (Figures on weight from L. I. Dublin, "The Influence of Weight in Certain Causes of Death," *Human Biology*, 2:159–185, May 1930.)

the attitude of the group toward nonconformity. For example, it may be observed that in the British Isles and in the United States the security of the state is greatly valued and subversion is a serious offense. But the degree of freedom of speech and action permitted in England is greater than in the United States in the middle of the twentieth century. The reasons for this difference are probably complex; but an important factor is doubtless the longer British tradition of freedom. Both the United States and England have had reason to fear the Soviet Union and its international Communism; but the threat to England has been greater, since England is geographically closer and more vulnerable to atomic bombing. Yet the English have not shown the anti-Communist hysteria which has gripped American society. In England the Communist Party has not been outlawed, as in the United States; and there is more freedom of dissent. The tradition of freedom means there is more tolerance of political radicals and less social pressure exerted against those who do not look with favor on the status quo in economic organization. On the other hand, there is probably less tolerance shown the intolerant.

There is a change in tolerance in times of crisis. If war were to break out between England and Russia, the English tradition of intellectual and political freedom would be modified in the direction of greater restraint. For freedom of speech and action are privileges which can be more safely accorded to the members of a group when there is no immediate threat to the sovereignty of the group, as in times of peace. Abraham Lincoln is noted as an advocate of

88 Trobriand Albino

Occasional extreme variations are intentionally preserved by the group. This rare albino in the Trobriand Islands, who is not a defective, is shielded by his companions from his bad maladjustment to the tropical sun. Social pressures in human society are functions of cultural values, which vary greatly. (Photo from Wide World.)



freedom of speech and a free press. Yet when the Civil War broke out, he suspended the writ of habeas corpus, closed down hostile publications, had their editors arrested and jailed. He was, he said, confronted with a reality, not a theory. The unity of the nation was at stake. The successful execution of a war requires swift and united action. Under the circumstances, discussion and controversy are time-consuming and divisive; and there is less tolerance of freedom of speech. Indeed, it has been observed that when war is declared, the first casualty is the truth.

On freedom of speech the limits of tolerance are reduced, but on freedom in other areas the limits may be extended in a crisis such as war. Thus greater freedom of sexual behavior is accorded the population, especially the members of the armed forces who are separated from their mates or are deprived of normal association with members of the opposite sex. There may be a general relaxation of moral behavior under the influence of the ideology of eat, drink, and be merry, for tomorrow we may die. There are observers [10] who report that sexual behavior in the armed forces of the United States during the World Wars did not differ greatly from behavior at home during peacetime. Whether these observations are valid or not, deviation from sexual norms during wartime invites less censure.

Deviation from the norms is tolerated more in a large, heterogeneous community than in a small, homogeneous one. Two correlated factors are relevant here, the size and the complexity of the group. The bigger the group, the less the individual is identified and noticed, and the freer he therefore is to do as he pleases. The more complex the group, the more likely the group is to have various sets of norms, some of which may be conflicting and contradictory. Under the circumstances, individuals find support for their behavior and the opposition is limited. For example, unconventional conduct is tolerated in Greenwich Village, a neighborhood of New York City. These individuals are not molested, because New York City is a very big community and the unconventional behavior of a relatively small group does not constitute a threat to the city, especially since the residences of the unconventional individuals are segregated.

Since communities have been getting bigger, and a larger percentage of the population lives in big places, the import of the remarks of the preceding paragraph is that social control is less effective in modern society than it used to be in the smaller and simpler societies of the past. In the groups of primitive hunters which average perhaps less than 50 persons, it is not so difficult to keep an individual in line. He is subject to constant scrutiny, there is no escape into anonymity as there is in the modern city, and the pressure of the folkways and mores is more certain. For those who deviate, gossip and ridicule are effective controls, for one of the most devastating punishments is humiliation before a familiar group whose opinion one values. Experimentation [11] has shown that the more cohesive the group, the more likely the rejection of the deviate. And small, homogeneous communities are more cohesive than large, heterogeneous ones.

In the big complex communities, the informal social controls of Main Street and primary groups are present but are less effective than in the smaller places. They are supplemented by formal agencies of control

[10] Alfred C. Kinsey *et al.*, *Sexual Behavior in the Human Male* (Philadelphia: W. B. Saunders Company, 1948).

[11] Richard M. Emerson, "Deviation and Rejection: An Experimental Replication," *American Sociological Review*, 19: 688–693, December 1954. The study which was replicated and confirmed in general is: S. Schachter, "Deviation, Rejection, and Communication," *Journal of Abnormal and Social Psychology*, 46: 190–207, 1951.

Table 9 · Average Number of Police Department Employees, by Size of City, April 30, 1955*

Size of City	Police Department Employees Per 1,000 Inhabitants
Under 10,000	1.4
10,000–25,000	1.5
25,000–50,000	1.6
50,000–100,000	1.7
100,000–250,000	1.8
Over 250,000	2.4

*From F.B.I., *Uniform Crime Reports*, XXVI, No. 1, 1955, p. 24.

like police and courts. As Table 9 shows, the bigger the city, the greater the number of police department employees per 1,000 inhabitants. Presumably the larger places have more crime. Even with the augmented police force and other formal agencies, the control of socially deviant behavior is not as effective in the very large communities as it is in the small places without benefit of so much formal control. The weakening of group controls in the modern society means that there is more freedom, that the limits of tolerance of unconventional conduct are greater.

The family, the neighborhood, and the church are less powerful than formerly as agencies of social control; business and the state are more powerful. In earlier times social control was exercised mainly by the family, the local community, and the church. There was little industry apart from the family, and the state was not highly developed. The authority of the family over its members is evidenced by the term *patriarchal*, which means the power of the father. This power could be very great as it was in the Roman period, when the father had the power of life or death over his children. Very widespread as a means of social control was corporal punishment, which is common when the relationship between individuals is that of superior and subordinate. In colonial America husbands had the right of chastisement of their wives. The power of the family is great where production is in or about the home, as it is in a farming economy, since production calls for a head who has power. In a household economy, the members of the family are subservient because they must depend upon the family enterprise for employment.

The local community reinforces the individual family as an agency of social control, because the small community is an organization of a cluster of families that are well known to one another. The church provides a moral underpinning for the customs of the group, as well as developing its ideology regarding the spiritual life. The church uses such sanctions as shunning and excommunication to keep its members in line, as well as the positive means of confession, repentance, and forgiveness.

With the transfer of economic production from the family to industry, the growth of size of communities, and the trend toward secularization, there has been a notable shift in the distribution of social control among the major institutions, away from the family, the local neighborhood, and the church to industry and the state. Husbands may no longer chastise or confine their wives, and the Society for the Prevention of Cruelty to Children will intercede if parents are too harsh with their offspring. The fear of religious sanctions is not so great as it once was. The institutions which have risen to the forefront of social control are economic organization and government, especially the latter. If an industry is organized under a closed shop, an individual cannot get a job unless he joins the union. If he displeases his employer or his union, he may lose his job, an important economic sanction. It is reported [12] that big corporations strongly in-

[12] William H. Whyte, Jr., "The Wives of Management," *Fortune*, 44: 86–88+, October 1951; "The Corporation and the Wife," *Fortune*, 44; 109–111+, November 1951.

fluence the kind of wives that executives marry, even as in earlier times the choice of a mate was dictated by family considerations. Sovereignty, or ultimate power within society, rests in the state, which controls through legislation, the police, the armed forces, the courts, and the prisons.

The highly valued member of the group has more freedom. The status and reputation of the individual are also factors affecting the amount of conformity expected of him. First, it should be noted that popularity is associated with conformity in the usual situations. A person gets to be popular in part by living up to the standards of the group, or better still, by surpassing them. Generosity and consideration of the wishes of others are virtues which the group esteems and rewards and which help to make an individual popular. Because of his superior status in the group, the popular individual is accorded certain privileges, including greater freedom of speech and action. Thus a well-liked teacher is freer to express dissenting opinions and take issue with the administration of the school than is a teacher who is disliked by his associates. If the teacher is also prominent in his profession, his status is even more secure and he is freer still to speak his mind. It is a common observation on the college campus that the professionally secure and well-liked teacher, who observes all the usual courtesies and amenities and who is morally above reproach, can often with impunity rise to the defense of unpopular causes, whereas the advocacy of the same policies by a tactless, unpopular, and incompetent instructor may bring not just disapproval but punishment and even dismissal.

Another way of putting the same idea is that the highly valued member who is dissatisfied with the norms of the group because he thinks they are bad for the group will be likely to deviate more than the less secure members and take a stand against the norms.[13] The less valued members are more restrained by fear and by concern over their status in the group.

Some groups are expected to conform more than others. We have been considering variations in conformity on the part of different members of a group. We need also to note that society holds up different expectations for conformity for different groups. Thus ministers and school teachers are in our society supposed to be models of ethical and moral conduct. In the case of the minister, especially, the social control extends to the members of his family, to his wife and children, and in connection with the latter is said sometimes to lead to resentment and rebellion. Formerly it was not an uncommon practice to commit teachers to written contracts which spelled out in some detail where and how they should live and how they should deport themselves, especially in small communities where the new teacher was a stranger. Such a contract might, for example, set forth that the teacher was not to date her male students and that she was expected to attend Sunday school. Studies show teachers and clergymen with low rates of crime, divorce, and other socially disapproved conduct. These low rates may involve some selection of personality types, but they doubtless reflect the influence of close social control.

Tolerance of nonconformity is affected by the urgency of the issue. We have considered the effect of (a) the situation and (b) the actor on the approval or disapproval of social acts. We have finally to consider the role of the acts themselves. Bernard Shaw, being a highly valued member of a society with a tradition of freedom of the press, was permitted to advocate many

[13] Harold H. Kelley and Martin M. Shapiro, "An Experiment on Conformity to Group Norms Where Conformity Is Detrimental to Group Achievement," *American Sociological Review*, 19: 667–677, December 1954.

I promise to take a vital interest in all phases of Sunday-school work, donating of my time, service and money without stint for the uplift and benefit of the community.

I promise to abstain from all dancing, immodest dressing, and any other conduct unbecoming a teacher and a lady.

I promise not to go out with any young man except in so far as it may be necessary to stimulate Sunday-school work.

I promise not to fall in love, to become engaged or secretly married.

I promise not to encourage or tolerate the least familiarity on the part of any of my boy pupils.

I promise to sleep at least eight hours a night, to eat carefully, and to take every precaution to keep in the best of health and spirits, in order that I may be better able to render efficient service to my pupils.

I promise to remember that I owe a duty to the townspeople who are paying me my wages, that I owe respect to the school board and the superintendent that hired me, and that I shall consider myself at all times the willing servant of the school board and the townspeople, and that I shall cooperate with them to the limit of my ability in any movement aimed at the betterment of the town, the pupils, or the schools.

89 Code of Conduct for Public School Teachers

The perceptive student of sociology will be able to infer that the community in which these regulations were operative is probably a small, homogeneous community, where deviations from established norms are tolerated less than in a large, heterogeneous city. Actually the code is from a contract for a teaching job in a North Carolina town in 1927. Since then there has been a radical change in the demand for teachers and the available supply, not without consequences for their bargaining power. (Quoted in T. Minehan, "The Teacher Goes Job-Hunting," *The Nation*, 124: 606, 1927.)

unpopular causes like Fabian socialism, and many unconventional ones like vegetarianism; but not even the great Bernard Shaw could advocate incest, perhaps the most widely tabooed of all human acts. So successfully is this dread act condemned that the detected incidence of this "universal crime" in the populations of English-speaking Western societies is estimated to be less than one in a million.[14]

The taboo against incest is in the mores; and it is in connection with the mores (the customs deemed imperative for moral welfare) that conformity is most urgently re-

[14] S. Kirson Weinberg, *Incest Behavior* (New York: Citadel Press, 1955).

quired. Each society has its own set of moral standards to which obedience is enjoined. In the United States in the middle of the twentieth century the mores include democracy, monogamy, the ethics of modesty, and free enterprise. To question these norms is to invite serious group disapproval and even removal from the group. There is less censure directed against those who in speech or deed question the folkways, the ordinary customs of the group. If you appear for dinner without a coat, some eating places will bar you; but most will not. Appearing in public without clothes will bar anyone from all places except jails or mental hospitals.

Conformity to the mores. Behavior contrary to the mores is not permitted by society. One would hardly dare advocate slavery today, much less attempt to hold anyone in slavery. The mores are not, however, always negative proscriptions inhibiting action. They may require positive action also. Thus in a society where the family system is strong, and where courts of justice are absent or inadequate, an injury to a member of the Hatton family by a member of the MacConnell clan must be avenged. The Hatton family must inflict a similar injury on the MacConnells. If the taking of a life is involved, then a male member of the Hatton family must kill someone in the MacConnell family. If there is only one male to make the reprisal, he must do so even though he be a poet, a person with a horror of bloodshed, a believer in the commandment "Thou shalt not kill," or one who thinks that the courts and juries are better methods than feud practices. Such a person must kill or else he will be scorned by his fellows, ostracized, called a coward, and condemned to a life of shame among his fellow men. The mores compel a person to take positive action. In an age not very far behind us, it was the duty of the male to protect the female. If a daughter or a sister had her virtue violated through force or under persuasion by a male of a class with whom marriage was not permitted, death for the man was decreed, not by law, not by the courts, but by the mores. A man must avenge the honor of his daughter or his sister. If a man did not avenge the honor of his family he was considered to be a weakling unworthy to mingle as a man among men.

The mores can make anything seem right. The power of the mores is so strong that Sumner gives one of his chapters in *Folkways* the title: "The Mores Can Make Anything Right and Prevent the Condemnation of Anything." Is there anything that the mores cannot make seem right? [15] The mores in the South made slavery right a hundred years ago. The mores in Hitlerian Germany condemned democracy so that a young German would have been ashamed to admire anything democratic. The mores can even make the abhorred incest right. In ancient Egypt it was considered proper and right that the highly selected noble blood of royalty should be intensified and perpetuated by brothers marrying sisters, very much as race horses are interbred today. Incest was something to be proud of. The mores can make the eating of human flesh seem right. The Chames of Cochin China eat the livers of slain enemies, believing that the liver is the seat of courage, which will be transmitted to them. When the chief of the Miranhas was asked why his people practiced so abominable a custom as cannibalism he replied that he was surprised that some people thought it an abominable custom. He said, "You whites will not eat crocodiles or apes, although they taste well. If you did not have so many pigs and crabs, you would

[15] The discussion here is concerned with "right" as defined in practical terms by prevailing custom, not with "eternal verities" such as those which religious and ethical systems attempt to set up. According to the latter, customs can compel any kind of conduct, but the compulsion does not necessarily make the conduct "right."

eat crocodiles and apes, for hunger hurts. . . . When I have killed an enemy it is better to eat him than to let him go to waste. Big game is rare because it does not lay eggs like a turtle. The bad thing is not being eaten." [16] The mores made it right for the Eskimos to kill their old people. In ancient Sparta infanticide was an established custom. With us it is right to kill murderers and to take the lives of soldiers in war.

What is right at one time may be wrong at another. The mores can make something right at one time and wrong at another. The mores make slavery wrong today, yet a century ago they made slavery right. It was wrong for a woman to be seen at a bathing beach a few years ago without stockings and a skirt reaching to the knees. Now it is all right to wear a bathing suit that shows not only the legs but the midriff. At that earlier time it was not right to speak in public of the legs of women; the word "limbs" was preferable. At the beginning of the century it would have been wrong for a woman to smoke a cigarette. Forty years later it is all right. Today there is no censure for those who engage in sports on the Sabbath; in colonial times such conduct was unthinkable. "Virtues and vices," wrote Sir James Jeans aptly, "have frequently changed places as life moved on through the ages; witch burning used to be a virtue and lending money at interest a vice." [17]

Sins of omission are usually considered less reprehensible in our culture than sins of commission. One final observation regarding the nature of socially condemned acts is expressed in the statement that sins of commission are in general more highly disapproved than corresponding acts of omission. Thus in the United States it is thought to be worse to pay for one's debts with rubber checks than to leave one's bills unpaid. When bills are left unpaid, it is possible to assume that they have been overlooked; and, if not, there is the alternative assumption that the debtor has insufficient funds. Neither of these assumptions is as damaging as the definite knowledge that an attempt was made to deceive by false payment.

[16] William Graham Sumner, *Folkways* (Boston: Ginn and Company, 1906), p. 331.

[17] Sir James Jeans, in *Living Philosophies* (New York: Simon and Schuster, Inc., 1931), p. 110.

Techniques of Social Control

We turn next to an examination of the types of social control, specifically the methods used by the group in the effort to bring deviates closer to the norm. But first we need to note that social order is largely maintained by the internalization of social norms. An ordered society is achieved by means of social organization and is transmitted from the older generation to the newer by the learning process. The young learn the values of the society and the ways of doing and thinking that are deemed to be right and proper. This learning process is called *socialization.* In a later chapter [18] we shall see how, in the process of socialization, the values of the group are incorporated into the personality of the growing child. They become part of what the psychoanalysts call his superego, or ethical system, and affect his ego, or conception of self. In this way the individual appropriates the values of the group and is prepared to defend them and transmit them in turn to others. The internalization of social norms means that the group and its ethical system are always with the individual, even when he is alone. The socialized individual has acquired the habits that make him a dependable member of the group. Social control is necessary to take care of the failures in socialization and to provide reinforcement for those who have learned their lessons well.

The basic processes involved in socializa-

[18] Chapter 12.

tion and social control are the same, namely, praise and blame, or rewards and punishments, for behavior which is approved and disapproved, respectively. As they work out in practice, however, the processes differ in emphasis and degree in the two situations. Thus social control may employ capital punishment, but obviously socialization cannot.

The three types of sanctions: physical, economic, and social psychological. With lower animals, the principal form of control used against those who disturb the order of the group is physical punishment. Thus among baboons the overlord of a harem of females will attack the male who tries to appropriate one of the females. This can scarcely be called maintaining the standard of the group against attack, since the baboons have no cultural norms. It is rather a defense of the status quo, established by force and not by principle. There is only sparing use of economic sanctions among lower animals, as when a male chimpanzee deprives a female of food when she displeases him. Again this is not group control but rather the enforcement of individual will. The purpose of these remarks is to show that lower animals use mainly physical means to administer discipline, precisely because they lack language and cannot, as does man, use symbolic communication which is the essence of social psychological sanctions. However, among the lower animals, use is made of sounds and gestures which are symbols and serve as warnings.

Man, on the contrary, uses physical sanctions least and social psychological sanctions most, precisely because he is a cultural animal and communicates largely through symbols. If possible, human beings are likely to use symbolic sanctions first, resorting to the other types of sanction only if the symbolic approach fails. Thus a mother may warn her child: "Behave, or I shall spank you. Or if you continue to misbehave, you will lose your allowance."

In practice, the three types of sanction are combined in various ways. Thus a judge may sentence the defendant to pay a fine and serve a certain number of days in jail. And physical punishment entails more or less humiliation, a form of psychological punishment, as when among the Hopi Indians a boy who misbehaves is carried by his uncle about the community while the villagers splash water into his face. To correct wrong-doing, pain is inflicted, but this may be coupled with reward for good behavior, or reward in anticipation of good behavior. A Hopi boy who becomes troublesome is visited by a member of the Katchina Society, who wears a terrifying costume and mask and threatens to take the boy away and eat him. The boy's mother begs the Katchina not to do it and finally, after much importuning by the mother and promises by her that her son will behave himself in the future, the Katchina reluctantly accedes to her request and departs, but not without leaving behind a bow and arrow for the boy. The boy has hidden in the room within earshot of the discussion and is first terrified, then relieved, and finally gladdened.

Social control utilizes rewards as well as sanctions. The group holds out positive inducements for conformity. There are, strictly speaking, few if any physical rewards comparable to physical punishments. The handshake, the kiss, or the embrace are symbols of approval and do not involve much physical pleasure which would be the counterpart of the physical pain of corporal punishment. As symbols, they are more accurately social psychological techniques. Economic rewards probably most often take the form of promotions which entail more social prestige as well as more income. Studies [19] in the Army of the United States showed that those who conform to estab-

[19] Samuel A. Stouffer *et al.*, *The American Soldier*, Vol. I (Princeton, N.J.: Princeton University Press, 1949), pp. 261–262.

lished norms are more likely to be promoted than those who do not. Privates were asked in September, 1943: "Do you think the Army's control is too strict?" Of those who said No, 19 per cent had become PFC's by January, 1944, compared with 12 per cent of the others.

Effectiveness of Social Control

How effective is a given method of social control in a particular situation? The answer depends on the outcome sought. If the aim of control is to punish the deviate, then any method is effective if it is regarded by the deviant individual as punishment. If the objective is to deter the deviate so that he cannot continue to transgress and harm the group, then obviously any method that isolates him from others is effective. This is, of course, the rationale back of imprisonment. The limitation of the method is that it is infallible only so long as the deviate is isolated from the group; and transgressions may be resumed, or even intensified, when the imprisonment terminates. This has led in Western society to still a different test of the effectiveness of social control, and that is success in persuading the deviate to conform to the group norms. This is the goal of rehabilitation and is approached via the methods of counseling and psychotherapy, whether it be with the criminal in the prison or the problem child in a child-guidance clinic. The interesting point is that these methods of rehabilitation, by which we now lay such store, do not utilize the conventional methods of social control. They make no use whatever of sanctions or punishment. They can be said to utilize rewards only indirectly, as in the expectation that a reformed criminal will be helped to find a job. The principal appeal is the social psychological one of satisfaction in achieving a better adjustment to society. In the rehabilitation process involving counseling and psychotherapy, praise and blame are not used so much as is scientific inquiry into the causes of the deviant behavior.

In general, the more attractive a group is to the individual the greater will be the effectiveness of pressure to conform to the group.[20] We are all familiar with the child who offends his parents and then is contrite because he loves his parents and does not wish to hurt them. On the other hand, there is the juvenile delinquent who appears to be incorrigible and who does not respond to pleas as pressures for reform. In more cases than can be accounted for by chance, it has been shown that juvenile delinquents reject[21] or are rejected by[22] their parents. This means that delinquents, more often than non-delinquents, do not identify with their parents and do not value their membership in the family group. The father is a symbol of authority. When the child rejects his father, he often rejects other symbols of authority, like policemen, judges, and prison officials. The rejection by the father may be generalized into a feeling by the child that society as a whole is against him. He develops an attitude of rebellion or resentment and becomes motivated by the desire for revenge.

The attractiveness of the group for the individual, on which the effectiveness of social control depends, may be seen in terms of the opinions of others. The child is born into groups of individuals who become observers and judges of his conduct. Because they also cater to his needs, he comes to value their judgments. If they accept him and continue to satisfy his needs, he becomes positively identified with them emo-

[20] Leon Festinger, "A Theory of Social Comparison Processes," *Human Relations*, 7: 117–140, 1954.

[21] Ivan Nye, "The Rejected Parent and Delinquency," *Marriage and Family Living*, 18: 291–297, November 1956.

[22] William Healy and Augusta F. Bronner, *New Light on Delinquency* (New Haven, Conn.: Yale University Press, 1936).

tionally and seeks tc please them. If they reject him ar.d do not gratify his needs, he becomes negatively identified with them and seeks to displease them.

For punishment of wrong-doing, society depends mainly on the sensitivity of the individual to the opinions of others. Nearly all punishments, whether symbolic like ridicule or non-symbolic like a monetary fine, involve loss of reputation in the eyes of other members of the group, leading usually to a sense of shame. Punishment such as exile, ostracism, excommunication, and imprisonment involve also a reduction in association and communication with others.

The effectiveness of social control depends on the autonomy of the group. The nature of the individual being controlled is a factor in the effectiveness of social control; but so, too, is the nature of the group that applies the pressures. The more autonomous a group is, all other things equal, the more effective will be its social control and the less will be the deviation from group norms. This hypothesis was tested and affirmed in a study of 15 communities representing different cultures, ranked according to degree of autonomy, from limited awareness of outside groups to recognition of integration of the community into a larger group. The communities were also ranked according to the amount of internal social control and deviant behavior.[23] This finding may help to explain why social control tends to be more effective in independent groups with a unified command, as in simple folk societies, than in interdependent groups with divided authority, like modern complex societies. The individual in contemporary urban society is a member of many different groups, often with conflicting interests, which serve to restrict his loyalty to any one group. Divided loyalty means limited amenability to control by any single unit.

Conflicting commands lead to disobedience or frustration. In a study[24] using an experimental playground, the point just made, that divided group loyalty leads to less effective group control, was substantiated. It was found that if two adults give children commands in opposite directions, that is, to do and not to do something, the result is an increase in unconstructive activity and oscillating behavior. If the two commands are opposed, but positively phrased, as "go to point A" and "go to point B," the result was the greatest increase in disobedience. Negative commands produced the most inhibited and nervous activity in the children.

Some Social Consequences of Social Control

Those who deviate get more attention from the group than those who conform. We conclude this chapter with a brief discussion of some of the social consequences and practical implications of social control. An initial observation is that the deviates are often the ones who get the most attention. College teachers and administrators in the United States know that it is the troublesome student who takes up more of their time than the student who behaves himself. In studies[25] of small groups, it has been reported that more communication is directed toward those who take extreme positions on issues than toward those who take more moderate positions. The communication is an effort to win the extremists over to the prevailing viewpoint. If the effort fails, communication directed toward the deviates is greatly reduced.

[23] James G. Marsh, "Group Autonomy and Internal Group Control," *Social Forces,* 33: 322–326, May 1955.

[24] C. E. Meyers, "The Effect of Conflicting Authority on the Child," *University of Iowa Studies in Child Welfare,* 20: 31–98, 1944.

[25] L. Festinger *et al., Theory and Experiment in Social Communication* (Ann Arbor, Mich.: Research Center for Group Dynamics, 1950), p. 49.

Deviates are the objects of special group attention not only because of their unconventional behavior but often also because of the intensity of the positions they take. Studies [26] show that those who hold extreme positions, either positive or negative, tend to hold them more intensely than those who hold intermediate positions.

Another interesting observation is that a relatively few deviant individuals often get a highly disproportionate share of the attention and the services of the group. In St. Paul and Winona, Minnesota, as in Hagerstown, Maryland, and San Mateo, California, it has been determined that about 6 per cent of the families absorb 70 to 88 per cent of the relief load, 51 to 90 per cent of the health services, and 43 to 56 per cent of the adjustment services of the community.[27]

The knowledge that deviation is attention-getting leads some individuals to do things that are not customary in order to draw attention to themselves or their causes. Gandhi used hunger strikes to publicize his causes and win concessions from his opponents. An emotionally unstable individual may commit a crime in order to get his picture in the newspapers. The flagpole-sitter publicizes himself. The exhibitionist is especially likely to use deviate behavior, although not necessarily socially disapproved forms, as an attention-getting device.

The individual seldom rises above the level of his group. A number of important consequences flow from the tendency of the group to set limits to the variation in the behavior of its members. One is that the members of a group, as W. I. Thomas observed, seldom rise very much above the level of their group or fall much below it. The group sets the level of performance for its members. This means that the choice of a group by an individual is of the utmost importance in influencing the kind of learning he will do and the type of habits he will develop. If in a gang of boys it is the practice to go hatless in cold weather, then a newcomer to the group will, despite infected sinuses, wish to go hatless so as not to appear different and weak. If it is the practice for the group to stay out late nights, then the new member runs the risk of being called a sissy if he does not also stay out late, although this is not his practice and is not in keeping with his family's wishes. Mothers know what group pressure can accomplish in the way of influencing behavior, and that is one reason why they are so often concerned about the proper choice of playmates for their children. So, much depends upon what school or college a young man or young woman chooses to attend and what groups in a college they associate with. Similarly, choice of a place to live may vary from a small town to a large city and from one country to another. In an age of mass production, in a democratic era, and in the century of the common man, students should not forget the vast influence that lies in selecting the groups with which they are identified.

Group pressure causes individuals to change their behavior as they move from group to group, and to take on, chameleon-like, the protective coloring of the group. This can be observed in everyday life, as in the case of the youth who follows one set of standards when at home and another set when with his gang. The degree of change in behavior is influenced not only by the differences in group norms but also by the degree to which the individual identifies himself with the group and by the amount of pressure to conform exerted by the group. Adolescent gangs are conspicuous for the conformity they exact from their members,

[26] Samuel A. Stouffer *et al., Measurement and Prediction* (Princeton, N.J.: Princeton University Press, 1950), pp. 213 ff.

[27] Marion B. Folsom, "Statesmanship in Social Welfare." Address at Biennial Round Table Conference of the American Public Welfare Association, Washington, D.C., December 3, 1955.

who have a strong positive desire to be identified with the group. Sometimes the identification has a negative feeling tone, and conforming behavior results mainly from the desire to escape punishment for nonconformity rather than from a positive desire to be identified with the group. Such apparently was the case in concentration camps. One observer [28] who spent a year at Dachau and at Buchenwald — the two largest German concentration camps for political prisoners in World War II — reports that many became pliable to the demands of the Gestapo, some because they came to accept the Nazi goals and values as their own, others because, under the stress of severe punishment for any deviation from group regulations, they regressed to childhood attitudes of dependence upon their masters.

The group is an effective device for changing individual behavior. Since individuals are highly sensitive to group pressure, one of the most effective means of changing individuals is via the group. Group pressure may work better than a direct approach to the individual himself. In a deteriorated section of a large city where juvenile delinquency was a serious problem, a group of social workers who had long been dealing with individual offenders tried a new attack upon the problem. In the local settlement house, they organized athletic teams, naming as captains the leaders of the local gangs, who in turn appointed their lieutenants as managers. Seeing their leaders interested in the sports program, the rank and file drifted into the settlement house. Off the city streets and engaged in wholesome sports, these boys had less provocation to delinquency, and the rate fell off sharply.

The group is often a better disciplinarian than a leader is. The point deserves to be stressed that the group as a whole is often the best of disciplinarians. That is to say, the group itself is frequently able to exert more effective control over the conduct of its members than can an outside individual charged with special authority. As a rule the most efficient regulator of all is a group of persons of the same age and interests. A large measure of the success of modern nursery schools is due to this fact. Many a little child who is a serious disciplinary problem to his parents conducts himself properly when placed in a nursery school. Not wishing to court the disfavor of the other children, he gives up his antagonistic ways and conforms. The power of the group in regulating behavior is well illustrated also by an experience in a certain boys' reformatory.[29] The old director had tried to keep order by a system of physical punishment administered by the guards. The result was not satisfactory. It is said that in talking to the boys the men always stood as a matter of precaution with their backs to the wall for fear of an attack by another boy. The new director undertook to use the power of group opinion as a disciplinary force. The problem of disorder in the dining room was handled by giving a banner to the table with the best conduct, and with the banner went a double portion of dessert for each member at the table. If a boy threw a potato across the room he was at once under disapproval from the other members at his table because of the danger to their chances of winning the banner and of getting the extra desserts. Besides, if there was any general disorder, the privilege of attending the movies was taken away from the entire group. The responsibility for the maintenance of order was shifted from the guards to the boys themselves. Marked improvement in discipline resulted, confirming the belief that the organized group is itself the best disciplinarian of its members.

The converse of the foregoing is also true. Individuals are not only cordial to changes

[28] Bruno Bettelheim, "Individual and Mass Behavior in Extreme Situations," *Journal of Abnormal and Social Psychology*, 38: 417–452, October 1943.

[29] As told to the authors by the leader of the Oregon State Reformatory.

introduced by the group to which they belong, but they tend to be hostile to innovations suggested by outsiders or even by newcomers to the group. Carol Kennicott found this to be so, as has many a college president who sought to introduce far-reaching reforms during the first year or two of his administration. Another illustration is the resentment which Southerners show toward suggestions for social reform in the South made by Northerners — not an uncommon practice; whereas comparable proposals made by highly regarded native sons are often given respectful attention. One of the surest ways of jeopardizing a reform program, no matter how appropriate, is for members of the out-group to propose it.

SUMMARY

Since human groups are cultural groups and are organized around norms or standards of conduct, groups bring pressure to bear upon those who deviate. The more extreme the deviation, in general the greater is the social pressure to conform. Some deviation may be permitted, the amount depending on the urgency of the norm or issue, the tradition of the society, the existence or nonexistence of crisis, and the status of the individual.

Techniques of social control are positive and negative or rewards and punishments, in three interrelated areas, the physical, the economic, and the social psychological. Since man lives mainly on the symbolic level, he mainly utilizes social psychological means of social control.

The effectiveness of social control in a given instance depends on the value the individual being controlled attaches to the group, the autonomy of the group, and the consistency of the cultural directives.

One of the consequences of social control is that a relatively few deviates get a disproportionately big share of the attention and resources of the group. Deviation may also be used as an attention-getting device. Because of group pressure, individuals seldom rise much above or fall much below the level of their groups, highlighting the practical importance of the company one keeps. The group is ordinarily a conservative influence, maintaining the *status quo;* but if change is desired, group pressure can be utilized to promote change, by working through the group as a whole rather than by working with the members individually.

Social control is closely related to social adjustment, which is the central theme of this book. Those who deviate from the norms are not well adjusted to those norms. Social control is concerned with improving the adjustment by changing the individual or his situation or both. On the contrary, social reform — which will be considered in a later chapter — is concerned with changing the norms.

QUESTIONS FOR DISCUSSION

1. How does the pressure of the natural environment resemble and differ from group pressure?
2. In what ways does a highly valued member of the group have more freedom? In what ways less freedom?
3. "Spare the rod and spoil the child." True or false?
4. What connection, if any, is there between conformity and advancement in one's job?
5. Why is ridicule such a widespread form of social control?
6. What is the relationship between social control and social reform?
7. How does social control in small homogeneous communities resemble and differ from that in large, heterogeneous ones?
8. What changes, if any, have occurred in the relative roles of the major institutions as agencies of social control?

TOPICS FOR REPORTS

1. Deviation as an attention-getting device.
2. Techniques of social control.
3. Studies of the effectiveness of verbal and nonverbal methods of control.
4. Effect of conflicting authority on the child.
5. The relative effectiveness of democratic and dictatorial means of control.
6. Variations in deviant behavior in different societies.

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Part Four:

Personality

Whereas the preceding section of this book dealt with the collective aspects of group life, the present Part IV focuses on the individual — specifically on the role of social experience in the development of personality. By personality we mean the integration of the social psychological behavior of the human being, represented by habits of action and feeling, attitudes, and opinions. This behavior contrasts with physiological behavior, although the two are interrelated. Personality, as used here, is an inclusive term which covers values as well as other aspects of behavior. Since personality is developed in social situations and is expressed in interaction with other people, it has an important social aspect. Viewed from this social aspect, one's personality is the totality of impressions one makes on others.

We are interested in knowing how personality is formed, maintained, and changed. The sociologist is concerned not with all the determinants of personality but primarily with the social influences. The social influences begin at birth and are brought to play upon an organism that has been nine months in the making. The organism at birth is, in turn, the product of hereditary or genetic factors and the physical environment of the mother's womb. Because both these

factors vary, infants are born with individual differences. The social environments into which babies are born also vary, as do the natural environments.

The social environments into which babies are born consist of (a) groups of persons, supplemented by unrelated individuals, and (b) the social heritage or culture. The groups are the bearers of the culture and are in many ways the products of the culture. But some variations in group phenomena are not of cultural origin, as, for instance, variations in size of family within a given socio-economic segment of a given subculture. Differences in size of family are not without significance for the personality of the child. So we consider the group apart from culture and devote a chapter to "Group and Personality," after which we consider in "Culture and Personality" the influence of the social heritage.

The process by which the individual, in growing up, acquires the values of the group is known as socialization. The goal of socialization is conformity to the norms of the group. But there are failures in socialization. Hence the final chapter of Part IV is devoted to "Socialization and Social Deviation."

10

Group and Personality

In 1938, a girl about six years of age called Anna was found by social workers in an attic-like room in her grandfather's house where she had been kept since she was five and one-half months old.[1] Her clothing and bedding were filthy. She was unable to walk, talk, or use gestures. She could not feed herself when food was placed before her. She was emaciated and undernourished, with skeleton-like legs and bloated abdomen. She had been fed virtually nothing but cow's milk by her mother. Anna was an illegitimate child and was presumably isolated because her grandfather, a widowed farmer in whose house the mother lived, was hostile and opposed to having the child in the house. The mother, we were told, engaged in heavy work on the farm and had little time for Anna. After she was found by the social worker, Anna was removed to a county home where she stayed about a year and a half, and where she learned to walk, feed herself, and understand simple commands but not to talk. Finally she was moved to a private home for retarded children, where she lived for three years until her death from hemorrhagic jaundice in 1942. Before her death, Anna could string beads, identify a few colors, build with blocks. She was clean about her clothing, habitually washed her hands and brushed her teeth, and walked well. She had a pleasant disposition and tried to help other children. She talked mainly in phrases.

The school recorded that Anna was feeble-minded, but otherwise there was nothing peculiar about her. Her mother was a moron, but Anna's native intelligence is unknown. It is intriguing to ask what she might have achieved had she been reared in a normal environment. But it is clear that she achieved mental and social development that would not have occurred had she remained in isolation in the custody of her mother. Anna's case is instructive in showing how important for personality is the kind and amount of association we have with others.

THE BASES OF GROUP INFLUENCE ON PERSONALITY

When we ask why the human group is a powerful influence on personality, we may begin our answer by noting that if the newborn baby is to survive, he must have one or more associates who look after him. He cannot, for instance, get his own food or keep warm. So the human infant is dependent, and a dependent organism is subject to more influence by others than an independent organism like the tadpole which can literally swim for itself shortly after birth. The human infant is usually born into a group, the family, that looks after him. Or if he has only his mother, then mother and

[1] Kingsley Davis, "Extreme Social Isolation of a Child," *American Journal of Sociology*, 45: 554–565, January 1940; "Final Note on a Case of Extreme Isolation," *American Journal of Sociology*, 52: 432–437, March 1947.



90 The Remarkable Learning Capacity of Man

The learning capacity of man (with normal intelligence) is great, but the group plays an important role in its development. Because of an abnormal birth, Christy Brown was born almost completely paralyzed except for his left leg and foot. His extreme physical difficulties and inability to talk concealed the fact that the thinking portion of his brain was not affected, and he might have been mistaken for a feeble-minded child and shut away in a home for mentally defective children. Instead he was accepted as an ordinary member of the family by his extraordinary mother, father, and his many brothers and sisters, who kept him at home, taught him to read and to write with his left foot. The photograph is taken from his published autobiography. (Photograph reprinted from MY LEFT FOOT by Christy Brown. © by Simon and Schuster, Inc.)

child make the group. Or if the infant is abandoned by his mother or separated from her, and reared in an orphanage, then the infant is part of the larger group of the attendants and other orphans.

At birth the human organism is highly flexible and amenable to learning. A further significant reason why the group is a determinant of the human personality is the highly flexible nature of the human organism at birth which makes it especially susceptible to group influence or learning. Learning is to be understood as the processes by which the organism is modified by the responses it makes to stimuli.

Instincts in Animal Behavior

Before modern science discovered the role of the learning process, it was customary for psychologists to account for a great deal of human conduct in terms of instincts, defined as inborn tendencies to action.[2] Long lists of such presumed instincts were drawn up. Such common personality traits as parental love, imitation, pugnacity, and acquisitiveness were held to be the result of inborn dispositions. At the present time this type of explanation of human behavior is largely discredited, and the practice is to explain such traits in terms of learning.

Among the lower animals, instinct plays a large part in determining behavior; in certain species, the domination of behavior by inherited patterns is almost complete.[3] Ants,

[2] Cf. L. L. Bernard, *Instinct: A Study in Social Psychology* (New York: Henry Holt and Co., Inc., 1924).

[3] Cf. W. M. Wheeler, *Colony-Founding Among Ants* (Cambridge, Mass.: Harvard University Press, 1933); A. D. Imms, *Social Behavior in Insects* (New York: The Dial Press, 1931), Chapter 5.

for example, have a highly socialized life determined by instinct. In founding a colony, the queen excavates a cell in the earth and remains entombed until the eggs develop. After the first batch of eggs is laid, the queen feeds the larvae until they pupate. The first individuals are workers who take charge of the colony, feed the queen and themselves, and tend the brood, thus freeing the parent to devote herself to oviposition. Certain ants, usually those that are physically larger, act as defenders of the tribe and in some cases use powerful mandibles for crushing seeds or prey. Smaller workers tend the brood, forage for food, make nests, and cultivate fungus beds. When the original colony becomes overcrowded, some queens and workers leave the nest to start colonies of their own. Ants do all these remarkable things not as a result of learning, but as a result of inborn responses to stimuli. Because they represent so completely the automatic working out of inherited patterns, these behavior patterns of ants show a minimum of variation. The uniformity of the ant colonies stands in striking contrast to the greatly varied behavior in human communities. One ant colony of the same species is much like another, but there is a great difference indeed between a primitive community of a few families loosely organized as a hunting group, and a highly organized community of millions of families like New York City. The biology of the ant prescribes in detail what an ant colony will be like, but the biology of man exercises no such determinism.

Instinct is a term that applies more correctly to the lower animals than to human beings. The behavior of the animals is much more largely governed by inherited patterns. A newly hatched chicken will stand, walk, and peck at an object on the ground. A newborn baby is more helpless. The best performance the baby can give in the way of motor activity is a sort of random thrashing about of its legs and arms, and the mouthing and sucking movements already alluded to. In physiological terms we say that the organization of the nervous system is much less complete in the human baby at birth than it is in the chick, and the period of maturation is accordingly much longer in the human being.

Advantages and disadvantages of instinctive behavior. At first this lack of neural organization is a handicap to the human being, but later it becomes his greatest asset. Unlike the chick, the baby cannot shift for himself at birth, but because his actions are less rigid and predetermined, his learning is much more extensive. Instead of very simple and inflexible acts like pecking at a grain of corn, the child may acquire an extensive set of food habits. Eating, for human beings, may become an elaborate ritual. So with other behavior also. Man is not born with a building instinct such as birds have for nest-making. From one point of view the birds have an advantage because they do not have to depend on experience or on other birds to learn. Each generation of birds can function independently without suffering any loss of nest-building skill. Man would be helpless in building a shelter if he could not rely on the accumulated experience of the group. An Eskimo caught in an arctic blizzard can put up an igloo in forty-five minutes if necessary, but he can do this only because he has learned how from others. If he had not been taught this knowledge, he would perish. He has no igloo-building instinct to help him.

Birds improve the quality of their nests with practice, and skill is increased by learning from other birds, but the margin of improvement is relatively small. (See Figure 37.) This is not to deny that the nests of birds are remarkable; they are often superior to the means of protection of many primitive peoples who have only such a crude structure as a lean-to with which to

protect themselves from the weather. But give man time and he will learn to build a shelter that far surpasses any that instinct can provide. Man has learned how to build a more durable and spacious shelter, and he also knows how to heat it, cool it, and ventilate it to his liking. Human beings learn to do an amazing variety of things precisely because they are not dominated by instinct, but instead are endowed by nature with drives that are more flexible.

In some quarters there is objection to the use of the term instinct even when applied to lower animals, on the ground that it conceals the fact that lower animals are also capable of learning and need not be entirely dominated by inherited responses that are mechanically repetitive. It is said that even the lowly amoeba can learn, that is, change its behavior somewhat in response to new stimuli. The point is well taken. The differences between man and the lower animals can be exaggerated. But even if the difference in learning capacity between man and the lower animals were only one of degree and not one of kind, the difference would still be a considerable one and of the utmost significance, forming as it does the basis of culture which the lower animals lack, or possess only in negligible degree. There is, however, a type of human learning of which other animals appear to be incapable, namely, learning which involves the use of abstract symbols, and without which culture must remain very rudimentary indeed. Differences in kind of learning, as well as in degree, distinguish man from the lower orders.

To sum up the foregoing discussion, then, we may say that in the extreme dependence and flexibility of the human organism at birth we have the chief keys to the teachability of the human being and the reasons why other persons exert such a powerful influence in the formation of personality.

THE OPINIONS OF OTHERS AND THE IDEA OF SELF

We turn next to a consideration of how the group influences personality. We are concerned here with the processes of group influence and not with those of culture, which will be dealt with in the next chapter on "Culture and Personality."

The social environment consists of social interaction and culture. The social environment which is so important for personality is really made up of two parts, group interaction and culture. The two factors are difficult to separate because human groups are cultural, in contrast to the group life of lower animals, yet group and culture are not identical. Although culture is learned through the group, not all learning through others is cultural. Only learning which is transmitted from generation to generation as part of the social heritage is cultural. A great deal of learning, in which the cultural factor is subordinate or absent, takes place in relation to other persons. Group interaction is common to life in all cultures, in all ages. Everywhere there is leading, following, teaching, imitating, intimidating, fighting, ostracizing, praising, blaming. These are general patterns of conduct, or forms of social behavior. But what is praised or what is blamed varies tremendously from culture to culture. The Plains Indians in America praised stealing under certain circumstances, but in modern cities it is nearly always condemned. Mothers teach children in all cultures. But what a Christian mother teaches her child in the United States is different from what an ancestor-worshiping mother teaches her child in China.

It should not be inferred from the foregoing that the group processes are general and the cultural processes specific, for each has both general and specific aspects. The

difference is that cultural processes are conventional and may be codified; not so, group processes. To cite a specific illustration, sibling rivalry is very widespread in different cultures and in different families of the same culture, and is therefore a general group phenomenon. It may be regarded as a manifestation of the group process of competition arising between two siblings who become rivals for the affection of a parent or for social status. Yet each case of sibling rivalry is different. "Joseph's brethren hated him and could not speak civilly to him because they saw that their father loved him more than all the rest." The situation would probably have been different if Joseph had had sisters rather than brothers, or if all the brothers had been equally attractive or competent, at least in the sight of their father. Sibling rivalry probably varies a good deal according to family structure and composition, and is influenced by such factors as size of family, age difference of parents, age of parents at birth of child, intervals between births, sex of children, amount of illness, relatives living at home, and parental preferences for a particular child. There are, then, a considerable number of factors in the group situation which influence the degree to which sibling rivalry occurs and the way it is developed. Insofar as it affects these factors, culture influences sibling rivalry indirectly. In addition there may be a direct cultural influence via specific teachings on sibling rivalry which vary from place to place. In the United States, sibling rivalry is frowned upon; hence an older child who shows hostility toward a younger sibling because the latter has displaced him in the affection of his parents may later develop a sense of guilt or remorse; [4] whereas no such feeling is observed among the Pilagá Indian children, who show their hostility openly and directly and have fear only of retaliation.[5] The culture, then, patterns sibling rivalry and probably influences also the degree to which it occurs, but sibling rivalry itself is a phenomenon of group life and is affected by the many variables of family composition and structure. Sibling rivalry is, of course, an important influence in the development of personality, but it is only one of many similar influences derived from group interaction.

Group influences are relatively greater in early childhood; cultural influences, thereafter. There is an interval before conscious moral codes are applied to the child,[6] during which the influence of interpersonal relations is relatively very powerful. This is partly because a certain degree of maturation is needed before the child can understand the adult norms. Also children's cultures are probably more uniform than adult cultures, and therefore variation in children's behavior is due less to cultural differences than in the case of adults. The field of race relations furnishes illustrations.[7] An intensive study of 103 children in a racially mixed area of a seaboard city in Northeastern United States showed that at the age of six, a white child might refuse to play with a Negro child and give color as the reason. The four-year-olds, on the other hand, were conscious of physical differences but played together on the street with few racial incidents. If it were possible to press back still earlier, the awareness of community racial attitudes would probably be weaker still. The interpersonal reactions come much earlier, that is, the reactions, for example, to whether the other

[4] David M. Levy, *Sibling Rivalry* (American Orthopsychiatric Association, Research Monographs, No. 2, 1937).

[5] Jules and Zunia Henry, *Doll Play of Pilagá Indian Children* (American Orthopsychiatric Association, Research Monographs, No. 4, 1944).

[6] Margaret Mead and Martha Wolfenstein, *Childhood in Contemporary Cultures* (Chicago: The University of Chicago Press, 1955), p. 350.

[7] Mary Ellen Goodman, *Race Awareness in Young Children* (Reading, Mass.: Addison-Wesley Publishing Co., Inc., 1952).

children, regardless of color, are aggressive or not, considerate or not, and so on.

The early interpersonal relationships of the child influence his basic personality structure. The relationships that a very young child has with his mother, father, siblings, and peers profoundly affect the organization of his drives and emotions — the deeper, more unconscious aspects of his personality which are often referred to as "character structure." Research[8] involving boys and girls ten to eighteen years of age, members of different social classes, discloses a distinction between two aspects of personality: the deeper character structure and the relatively more superficial structure built around specific value systems. In each class there are various character types: aggressive, impulsive children, intimidated ones, and socialized ones; yet each class has a distinctive set of opinions, attitudes, values and habits respecting, for example, food, work, sex and play. The evidence suggests that homogeneity in attitudes, values, and habits, to which the name "modal personality" may be assigned, is more characteristic of socio-economic classes than is basic personality structure. The basic personality structure is more stable and more difficult to change.

How do such processes as praise and blame, cooperation and conflict, ascendance and submission affect personality? For affect it they do. Whether a person becomes a leader, a bully, a coward, an imitator; whether he feels inferior or superior; whether he is altruistic or narcissistic depends upon the kind of interaction he has with others. Group interaction molds his personality.[9]

How the child learns to be aware of others. At the beginning of life, and for some time afterwards, the infant does not show any special awareness of human beings; indeed he does not show any preference for animate over inanimate objects. This fact was observed in an experiment involving infants under one month of age.[10] Their reaction to different stimuli was noted at weekly intervals. During the first two weeks of life, their reaction to noises made by striking a porcelain plate with a spoon and by rattling paper was more frequent and positive than their reaction to the human voice. In the third week they showed about equal response to both kinds of stimuli, but in the fourth week the response to the human voice predominated. Apparently there are various stages in the process of conditioning; the child associates the human voice with feeding and other satisfactions, and comes progressively to favor the human voice, because rewards are associated with it. Still later the child associates a particular voice with a particular person, such as his mother or his nurse. Here we have, then, the developmental basis for the child's first social relationships.

The infant is born with a set of organic needs which other persons help to satisfy, and it is for this reason that the child learns to make differential responses to human beings. Because of these and other satisfactions, the child as he grows older becomes increasingly identified with other persons

[8] Robert J. Havighurst, "Social Class and Personality Structure," *Sociology and Social Research*, 36: 355–363, July–August 1952.

[9] A somewhat different distinction between group and cultural influences has been made by other writers, using a different terminology. Thus Kimball Young distinguishes between culture and "personal-social or inter-individual influences." "Personal-social here means the effect of another individual or group of individuals upon one, outside of codified forms of behavior. It is the person-to-person relationship, uninfluenced by standardized habits and ideas common to one's group." (*Social Psychology*, New York: F. S. Crofts & Co., 1936, p. 5.) See also the distinction made between "common-human" and "collective" processes.

[10] H. Hetzer and B. Tudor-Hart, "Die frühsten Reaktionen auf die menschliche Stimme," *Sociologische und psychologische Studien über das erste Lebensjahr*, 1927, pp. 107–124.

and comes to crave social relations. To the organic needs are added another, different set of needs which, because they are derived from the group, may be called sociogenic needs. Prominent among these acquired needs, largely built up around the ego, are the desire to belong to the group, to be accepted and loved by the group, and to enjoy good standing in the group. These have been described by W. I. Thomas as the wish for response and the wish for recognition.[11] The abhorrence with which human beings regard isolation from the group may be judged by the fact that solitary confinement is regarded as an extreme form of punishment. When an individual withdraws from association with other human beings, he is likely to be or to become queer. If his withdrawal from others is extreme, it may mean insanity. Obviously, then, the sociogenic drives are highly important motivating forces in personality.

How the concept of self develops. Clearly the idea of self is acquired, not inherited, since little babies do not have it. The notion of self begins to arise as the child learns something of the world of sensations about him. He learns to distinguish this color and that form; similarly he comes to learn that parts of his body belong to him. The fascination of the little child when he discovers his toes is familiar. In discovering his universe the child discovers himself. The idea of self develops in conjunction with the idea of other things. He learns that they are distinct beings and that he too has individuality. Acquaintance with his name and the use of pronouns aid the process of self-discovery. Little children get a great deal of practice answering such questions as "What is your name?" and "Whose little boy are you?" which emphasize the idea of self in relation to others.[12]

Others listen to us, observe us, and judge us. The self is thought of particularly in relation to others as listeners or observers. As listeners or observers, these outsiders are passing judgment. They praise the child for certain things he does, and blame him for other things. An eminent psychologist, G. Stanley Hall,[13] in writing about his early boyhood on the farm, tells how his father forced him to do many things which were distasteful to him. He had to drive the pigs to the market. His schoolmates jibed him about this so much that the boy took to driving the pigs by a circuitous route, far out of the way, to avoid going past the homes of his acquaintances. As a result he was late for school one day. When he entered the room, his teacher made some insinuating comments, to the great amusement of the whole class and to young Stanley's mortification. Years later this same teacher was one of Hall's associates at Harvard. It happened that this man sickened one night and died. Even under these circumstances, Hall reports, he found it difficult to feel any real sympathy for the fellow. This incident reveals how sensitive the child is to the opinions of others.

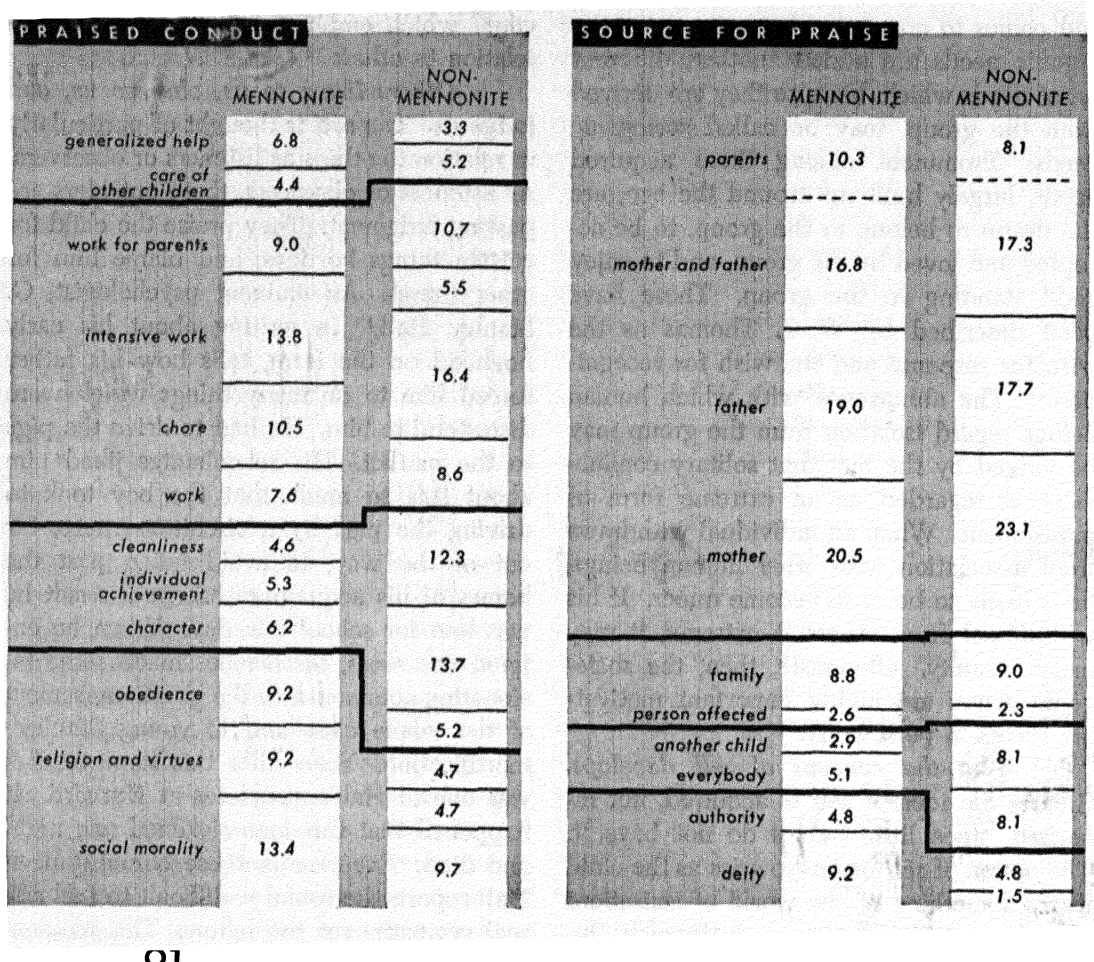
Hall[14] suggests in another place that a clue to the child's idea of self may be found

[11] Thomas also postulates two additional wishes, the wish for new experience and the wish for security, which seem more closely related to the organic drives of hunger and activity. W. I. Thomas, *The Unadjusted Girl* (Boston: Little, Brown and Company, 1923).

[12] In an attempt to throw light on the development of the idea of self, Cooley studied the self-words used by his own children between the 20th and 33rd months of life. He found that the use of the word "I" represented "the assertion of self-will in a social medium of which the speaker is conscious." (C. H. Cooley, "A Study of the Early Use of Self-Words by a Child," *Psychological Review*, 15: 339–357, November 1908.) This conclusion is confirmed by Read Bain, "The Self- and Other-Words of a Child," *American Journal of Sociology*, 41: 767–776, May 1936.

[13] G. S. Hall, *Life and Confessions of a Psychologist* (New York: D. Appleton-Century Company, 1923).

[14] G. S. Hall, "The Early Sense of Self," *American Journal of Psychology*, 60: 351–395, 1897–98.



91 The Distribution and Source of Praise in Two Groups

The values and sources of values in Mennonite and non-Mennonite children in rural areas. There is not much difference in amount of praise for work; but the Mennonites emphasize social morality, religion, virtues, and obedience, while the non-Mennonites stress individual achievement and cleanliness. There are also differences in the source of praise. These influences of praise and blame, which vary according to culture, are highly influential in molding the social nature of the person. The numbers are percentages. (From J. Kalhorn, "Studies in Topological and Vector Psychology: III. Values and Sources of Authority Among Rural Children," *University of Iowa Studies in Child Welfare*, Vol. 20, 1945.)

in the names or name reflecting approval or disapproval by which he is called by his intimates. A child to whom the epithet "Pet," "Sweetheart," or "Angel" is applied would be likely to have a different idea of self from one called "Imp," "Cry-Baby," or "Monkey." Indeed, it is possible to account in large measure for a given individual's conduct in terms of the praise and blame he has received from others.

We learn the opinions of others in part by taking the roles of others. The self has the distinguishing characteristic that it may be an object to itself; we speak of this as *self-consciousness.* A person directs behavior toward himself, converses with him-

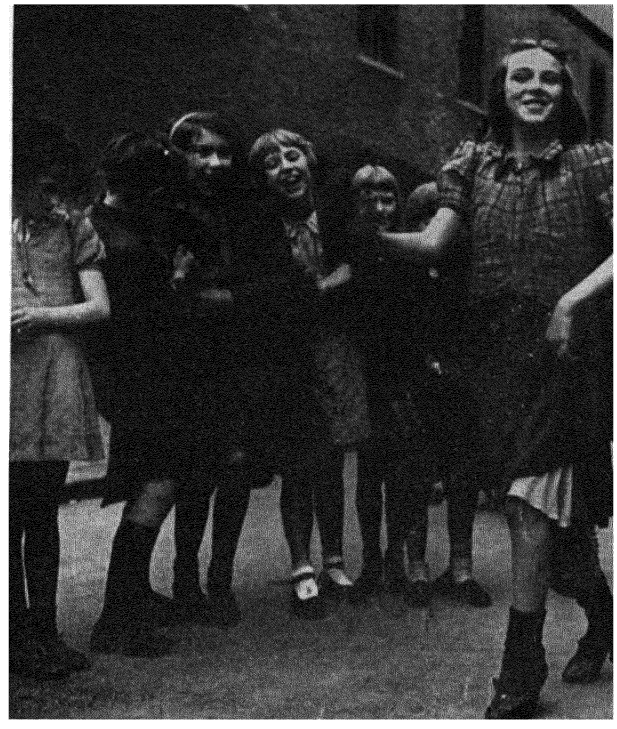
self, passes judgment on himself. The development of the self leads to the growth of conscience and ego.

The self does not exist at birth but arises in social experience as the result of taking the role of others.

In the development of the self, Mead [15] notes three stages: the stage of meaningless imitative acts, the play stage, and the game stage. During the first, occurring about the second year, the child imitates others without understanding the meaning of his or the other's actions, as when he "reads" a magazine. The child is beginning to place himself in the position of others. Later, around the third year, the child takes the place of mother, father, etc., in a whole variety of roles in ordinary play activities. In taking the role of others, he is in a position to act toward himself as others do. As storekeeper, for example, he offers merchandise to himself and bargains with himself as the storekeeper might. In this way the child gets outside himself and gains perspective on himself; that is, he makes an object of himself and forms a concept of himself. Since the child takes many roles, he has a series of selves; and since the power of integration and generalization are at a minimum, there is little consistency in his behavior.

The unified self, according to Mead, emerges in the game stage when the child begins to act toward himself from the viewpoint of the whole group, not from the standpoint of just one particular individual. As a member of a team, he must anticipate the behavior of all the other members; he accordingly plays a number of roles simultaneously, a generalized role of a number of people. The roles, moreover, are built around the rules of the game. As he appropriates the rules, the child generalizes his behavior: that is, he plays the role of what Mead calls "the generalized other." The team with its rules is thus a prototype of the organized community. The whole community is a "generalized other" with which the child becomes identified. Its values become incorporated into his neural structure. The self, viewed in this way, consists of an organization of roles taken over from the community as a generalized other.

In the interests of clarity, a distinction may be made here between role-*taking* and role-*playing*. Roles are taken when they are not one's own, as with the actor on the stage or the child when he undertakes to imitate his elders. But both the actor and the child have roles of their own, which they fill when they are not "acting" and which consist of an organized set of socially expected patterns of behavior. Role-taking may be purely for amusement or for better understanding of another's role, or in anticipation



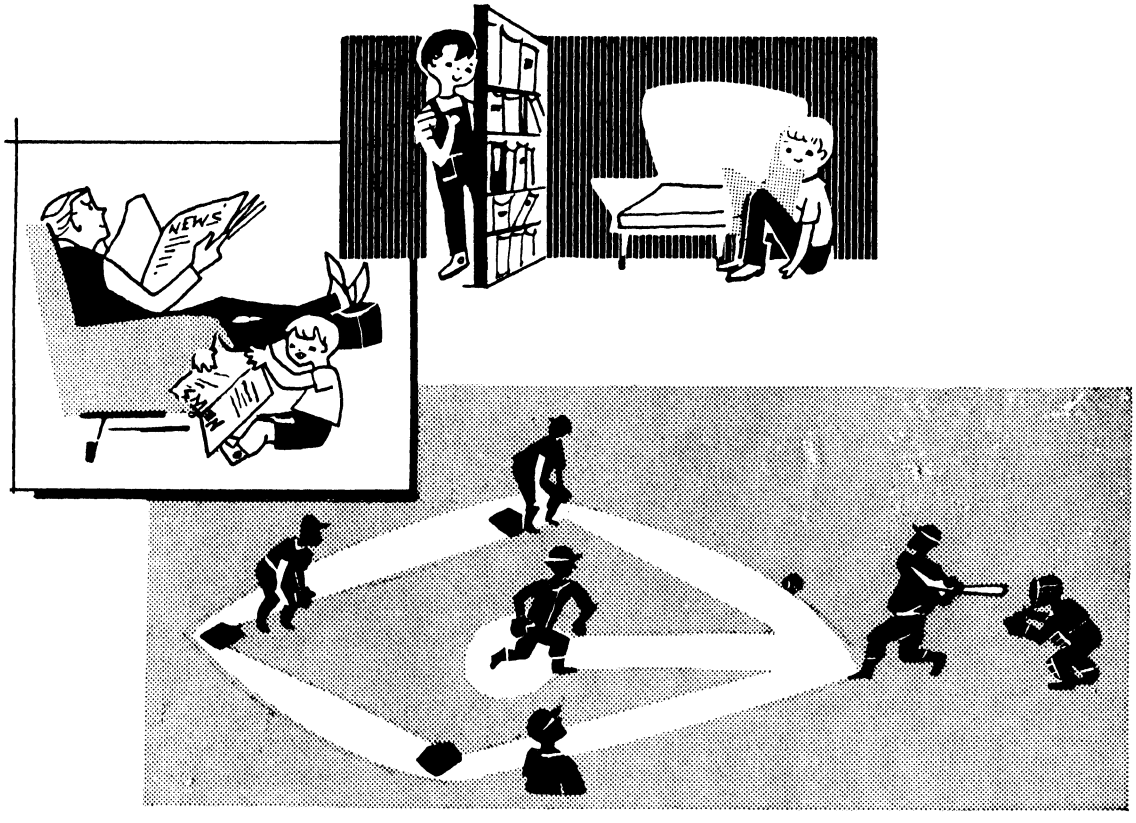
92 **Role-Taking**

This working-class girl in England is imitating the ways of a lady, perhaps the Queen Mother. Is she learning a role she admires? What functions does this role-taking serve? (Photograph by Bill Brandt.)

[15] G. H. Mead, *Mind, Self, and Society* (Chicago: The University of Chicago Press, 1934), pp. 135–226.

of playing that role at a later time. Role-taking may be incorporated in role-playing. This may be done either quite explicitly as in the case of the actor whom we expect to act out the roles of others, or more deviously by those who take other roles like the young college instructor who in the classroom imitates a favored teacher of his own.

We go through life adjusting our conduct, in part, to others. The imaginary play of children is a well-known phenomenon. Not so obvious is the fact that everyone goes through life playing roles which are responses to the attitudes of others, revolving especially around praise and blame. Little behavior, indeed, is undertaken without consideration for others. Human beings may be regarded as "acting" with reference to the opinions of others. In the view of Charles H. Cooley this tendency to adjust



93 Stages in the Development of the Self

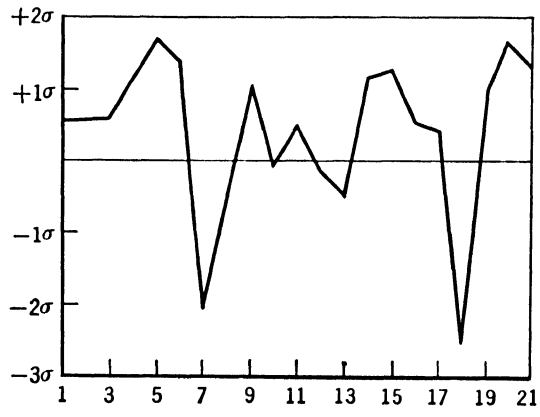
The self arises out of social experience, in part through taking the role of others. According to Mead, the two principal stages in the development of the self are the play stage (with two phases) and the game stage. The very young child imitates his elders without much understanding. Later, in play — "hide and seek" for instance — the child makes fragmentary responses to others. But later still, in the organized game, the team member must learn to take into account the varying behavior of all the participants if he is to play his own role properly. In this way, said Mead, the individual learns to respond to the "generalized other," or the whole group, as when he identifies with neighborhood, fraternity, or church.

our conduct to the conduct of others toward us is the central fact in personality.

Personality is a function of social situations. The point we have just made, that personality is a function of the expectations of others, is a special case of a more general principle, namely, that personality is a function of social situations.

When may we say of someone that he has the personality trait of perseverance? A person may show persistence in one situation and not in another. The trait of persistence is thus best defined in connection with particular situations. The same thing is true for other traits. It has been shown that children who have a reputation for being trustworthy may cheat if the temptation is great enough [16] or a child may be scrupulously honest in some situations and dishonest in others. Figure 94 shows the rating of a particular girl on twenty-one different tests of honesty. According to popular notion it is thought that if she were honest, she would react honestly in all situations. This, however, was not true. The girl deviated from considerably above average in the honesty of her reactions to some situations to very much below average in others. In a similar manner it has been shown that conformity and nonconformity tend to be specific responses to particular situations rather than general behavior patterns.[17] Biological traits, such as sensitiveness to heat or ability to see, do not vary in this way. The definition of sight is in terms of bodily structures and not in terms of group situation, though sight may be trained to be selective.

The opinions of others influence our conception of self. We implied in the foregoing discussion that the conception of self is built up out of the conceptions that others



94 Honesty Profile, Showing the Variability of the Subject

This girl was given 21 tests for honesty, and the chart shows quite clearly that she was very honest in some situations, while quite dishonest in others. Honesty as a trait seems to depend somewhat on the situation. (Adapted from H. Hartshorne, M. A. May, and F. K. Shuttleworth, *Studies in the Organization of Character*, New York, The Macmillan Company, 1930, p. 291.)

have of us. This led Charles Horton Cooley to describe the social self as "the looking-glass self." [18]

> "Each to each a looking-glass
> Reflects the other that doth pass."

The conception of self, Cooley pointed out, seems to have three principal elements: the imagination of our appearance to the other person; the imagination of his judgment of that appearance; and some sort of self-feeling, such as pride or mortification. The whole process, it will be noted, takes place in the imagination. In this regard it is somewhat different from the looking-glass, which does not so often throw back to us an image which is distorted by errors of perception. The opinions of others can only be inferred from what they say and do, and some individuals are more skillful at making correct inferences than others. Some individuals

[16] H. Hartshorne and M. A. May, *Studies in Deceit* (New York: The Macmillan Company, 1928), Book I, p. 286; Book II, p. 220.

[17] Robert A. Harper, "Is Conformity a General or a Specific Behavior Trait?" *American Sociological Review*, 12: 81–86, February 1947.

[18] *Human Nature and the Social Order* (New York: Charles Scribner's Sons, 1922), pp. 183–185.



95 Admiration and Imitation

Identification with a greatly admired parent is reflected in imitation of his behavior. Prince Charles and Princess Anne duplicate the hands-behind-back stride of their father, Prince Philip, Duke of Edinburgh, as they follow him across the polo field. (An International News Photo.)

watch more carefully or accurately the effect of their words or deeds upon others. What we are saying is that we have only images, or as Walter Lippman called them, "pictures in our heads," which may or may not correspond to reality. That is why the poet, Robert Burns, pleaded for the skill to see ourselves as others see us.

What evidence is there to support these interactionist hypotheses of self-conception? In one test,[19] individuals rated themselves on a five-point scale as to intelligence, self-confidence, physical attractiveness, and likableness. These responses were compared with the actual judgment of others, the "perceived responses of others" (that is, the subject's predictions of how others would rate him), and the notion of the generalized other (how the subject perceives *most* persons view him). Those accorded high esteem by others reflect a higher self-esteem than do those who are poorly regarded. Those who perceive that they are highly regarded show greater self-esteem than do those who perceive that they are not highly regarded, and the perceived behavior of others is more influential than the actual behavior. Those with high self-ratings perceive *most* others as viewing them highly. Thus the findings are that the attitude of others is related to self-conception, but the perceived responses of others are even more closely related to self-conception.

We regard some judges as more significant than others. It is common observation that we do not value all judges of our conduct equally but attach more significance to some than to others. On what bases are these "significant others"[20] chosen? Clearly one basis is the degree of intimacy and affection existing between us and them. We value more highly the judgments about us which are held by friends whom we esteem than we do the opinions of others who are just acquaintances, and we generally value the opinions of acquaintances more than we do those of strangers. Another basis on which we discriminate between judges of our behavior is the degree of power or authority which these others have over us. All things equal, our valuations are proportional to the degree of control which these others have over us. A student is likely to care more about the opinions of him which his instructors have than he is about the

[19] S. Frank Miyamoto and Sanford M. Dornbusch, "A Test of Interactionist Hypotheses of Self-Conception," *American Journal of Sociology*, 61: 399–403, March 1956.

[20] H. S. Sullivan, *Conceptions of Modern Psychiatry* (Washington, D.C.: W. A. White Psychiatric Foundation, 1947), pp. 18–22.

opinions of members of the faculty in whose classes he has not enrolled.

Our parents are usually our "most significant others." In the light of the above, it is not difficult to see why we generally look upon the members of our immediate family, and especially our parents, as our most significant judges, since they are the ones whose relationship to us is usually characterized by the greatest intimacy and power, especially during the early years of life. These observations are confirmed by a study [21] of Jewish adolescents in Philadelphia and Elmira who were asked: "Who are the persons whose opinion of you matters a great deal to you?" The modal number listed was four; about nine out of ten named one or both of their parents; in almost every case a parent was the first person listed. Some adolescents listed more persons than others; but by simple ranking, parents were mentioned most frequently, after which the order was the following: the peer group, teachers, siblings (tied for fourth place with aunts and uncles), grandparents, and finally assorted adults — rabbis, friends of the families, youth leaders.[22] There was a significant relationship between parental expectations and adolescents' attitudes, as well as a positive correlation between parent–child religious attitudes and behavior. Parents may be somewhat more "significant others" for Jewish adolescents than for some other ethnic groups because of the special importance attached to family life by Jewish culture.

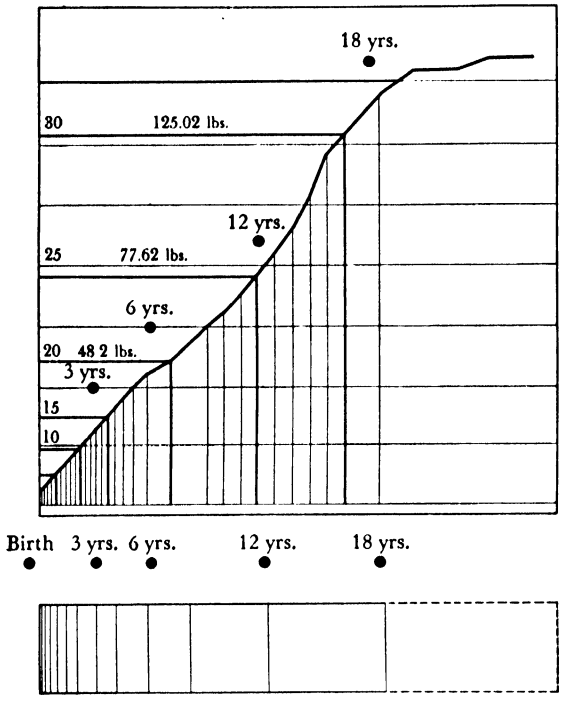
Our early experiences are very important for emotional development. One of the great contributions of Freud and his coworkers to our knowledge of the personality of the individual is that the emotional phases of personality are shaped largely during infancy and childhood, the first five or six years of life, and to some extent during youth. Adult situations such as one meets in occupational environment may affect the personality also, although not so profoundly as the early childhood influences. Childhood is the period of greatest mental growth. The child's brain grows fastest the first year, then slackens its pace. Children six years old have brains often well within the range of those of adults. The rapid development of the nervous system is ordinarily matched by a prodigious amount of learning during the early years. But even without this special growth factor, the early years would be the most important simply because they come first. This idea is expressed in the popular saying that first impressions are the most important. They leave their mark on the nervous system and affect all subsequent experience. As the twig is bent, so is the tree inclined.

Until recently the importance of the early years of life was not recognized and the fact is still not appreciated very widely. The influences of childhood are by general assumption bracketed as heredity. Another popular idea seems to be that nothing of much importance happens during the early period, except such things as concern health. From the fact that most persons find it difficult to recall childhood experiences, particularly those they had before they were two or three years old, it is assumed that these experiences count for little. Evidence of the widespread existence of this point of view is afforded by the usual run of biographies and autobiographies [23] which give only slight attention to the person's early

[21] Bernard C. Rosen, "The Reference Group Approach to the Parental Factor in Attitude and Behavior Formation," *Social Forces*, 34: 137–144, December 1955.

[22] Information supplied by Professor Rosen.

[23] A. M. Tozzer, "Biography and Biology," in C. Kluckhohn and H. A. Murray (eds.), *Personality in Nature, Society, and Culture* (New York: Alfred A. Knopf, Inc., 1948), pp. 145–157. Professor Tozzer shows the compulsive bent among biographers to see a biological explanation for human personality.



96 Rates of Physical and Mental Growth, from Birth to Maturity

The above figure shows the importance of growth in the early years of life, when the rate of growth is much more rapid than during later years. The upper chart indicates the physical growth of man from birth to maturity, with vertical lines added to mark the duration of the periods required for each 10-per-cent addition to the weight. (Adapted from Charles S. Minot, *The Problem of Age, Growth, and Death,* New York, G. P. Putnam's Sons, 1908.) The lines are close together at the start, one 10-per-cent gain following another in short intervals of time. As the child gets older, it takes longer to add the same proportional amount. The lower chart illustrates the arrangement of intervals of mental growth according to norms of development established by Gesell. The vertical lines represent the same time interval as in the upper chart. (Arnold Gesell, *The Mental Growth of the Pre-School Child,* New York, The Macmillan Company, 1925, p. 18.) There is an analogous concentration of mental growth in infancy. There are nine developmental intervals in the first sexennium of life and only three in the succeeding sexennia. According to this, there is, broadly speaking, relatively three times as much development in the first six years as in the following twelve, showing the special importance of the early years for personality.

experiences. An author may mention who his ancestors were, what his parents did, where they came from and where they lived, but usually there is very little about his earliest experiences with his family and playmates, and the meaning of these experiences for his disposition and character.

It is not always clear what makes a person domineering or submissive, expansive or reclusive, altruistic or selfish; but most of the researchers seek explanations in the group of habits of infancy or very early childhood. For instance, the following behavior was observed in a group of children at play in a child-guidance clinic. A slightly older child was placed with a younger child, and their behavior watched by observers unseen by the children. When a toy was introduced, the older child took the toy away from the little child, pushed the child down, and kept the toy. Similar behavior was repeated throughout the day. One child tended to develop selfish, bullying habits, while the other child learned avoidance devices and yielding habits. Such a situation might well continue in actual life outside the experimental laboratory for weeks, months, years. If an invisible statistician were keeping a record over such a long period, the grand total of such reaction patterns would be very large. Such repetition tends to fix habits, and to develop at a tender age personalities either with grasping and domineering tendencies or with side-stepping and avoiding traits.

Special importance of early family experience. Since the foundations of personality are laid in early life, our interest is directed particularly to the experiences the child has with his mother and father, his brothers and sisters, his playmates, and his schoolmates. In some cultures the responsibility of caring for the infant is not mainly the mother's but may be turned over to an older child or to a nurse or governess. Generally, though, the principal role in the

child's early life is played by his mother, in which case nothing matters more, so far as personality is concerned, than the kind of relationship a child has with his mother.

The family is also usually the principal determinant of the child's early values. In many fields of research, findings converge on the family as the principal social influence in the moral life of the individual. In one investigation, a large number of children were tested on their ideas of right and wrong, and the result correlated with the answers of the children's associates, as follows [24]:

Child and his parents	.55
Child and his friends	.35
Child and club leaders	.14
Child and school teachers	.03
Child and Sunday-School teachers	.002

These figures suggest that the moral judgments of these children are largely derived from their parents. There is evidence also that parental influence does more than form judgments; it influences conduct profoundly as well. Terman found that happiness in the parental family is the factor most highly correlated with marital happiness of offspring.[25] That is to say, the most important single asset for a happy marriage is to have come from a happy home. Still other studies show that character, as well as happiness, is generally a function of satisfactory family adjustment. Healy and Bronner report that juvenile delinquents are often children who at some stage of their development have been blocked in their needs for satisfying relationships in their family circle.[26]

The influence of peer groups on values and attitudes increases as the child grows older. The table above shows that the correspondence of ideas of right and wrong between children and their friends is second only to that between children and their parents. The family group and the peer group are pan-cultural, that is, found in all societies, whereas some societies lack schools and churches. For this reason we are interested in this chapter on group influences on personality in considering further the influence of the peer group on the behavior of the growing child. We observe that the influence of playmates generally increases with age throughout the pre-adolescent and adolescent years. This hypothesis has been tested on a sample of 322 children of lower socio-economic status in three age-grade levels, 11–13, 15–18, and 20–24, who were asked to give their attitudes and those of their parents and peers with regard to permissive behavior in the feminine role. The influence of the peer groups appears to be proportional to the length of adolescence.[27]

If we inquire into the reasons for this phenomenon, one explanation appears to be that the growing child comes to depend more on the peer group for the achievement of status and less on his parents, hence values more highly the opinions of his contemporaries. His status in his home is generally more or less secure; as Robert Frost has expressed it,

[24] H. Hartshorne and M. A. May, "Testing the Knowledge of Right and Wrong," *Religious Education*, 21: 539–554, October 1926.

[25] Lewis Terman, *Psychological Factors in Marital Happiness* (New York: McGraw-Hill Book Company, Inc., 1938).

[26] William Healy and Augusta F. Bronner, *New Light on Delinquency and Its Treatment* (New Haven, Conn.: Yale University Press, 1936). This research sought an answer to the question: why do we find a delinquent child in a family where the other children are not delinquent? A group of 105 delinquent children were compared with a control group of 105 non-delinquents from the same families. In nearly every case the delinquents were found to have suffered serious frustration in their family experience, while their non-delinquent brothers and sisters fared better.

[27] Lionel J. Neiman, "Changing Attitudes and the Conceptions of Peer Groups," (Paper given at the annual meeting of the American Sociological Society, Berkeley, 1953).

Home is the place where, when you have to go there,
They have to take you in.
. . . . . .
Something you somehow haven't to deserve.[28]

Status in the peer group has to be won and validated by being one of the group, which means subscribing to the group values. Only in a changing society, of course, are an appreciable number of the values of youth significantly different from those of their elders.

Where there is conflict in norms during adolescence, those of peer groups may outweigh those of the family. In a changing society the young people are likely to be more liberal, favoring the new, whereas their parents may be more conservative, favoring the values with which they have grown up and with which they are more familiar. This conflict between the generations is often particularly conspicuous in immigrant or minority groups, where the elders are identified with the culture of their own minority group, whereas the children seek to become identified with the majority group. In such a situation, the young may adhere more closely to the values of their peers than to those of their parents, as shown in a study [29] of conflicting group pressures from family and peer group in fifty adolescent Jewish high school boys and girls in a small city in upper New York. Unstructured interviews with the adolescents and a sample of parents were supplemented by observation in school activities and a structured interview schedule after a year. The use of kosher meat was chosen as an area of conflict between the children and their parents. Consideration must be given to the small size of the sample and the issue studied, but the data show that where there is conflict in norms, the adolescents tend less often to agree with their parents than with their peer groups, suggesting the great importance of peers' norms during adolescence.

In the United States, the conflict between the generations is affected by the discontinuity in cultural norms.[30] We send our children to school, keep them out of the labor force, and generally encourage dependence on parents. But as tests of adulthood, we expect our children in due course to find a mate and a job, and in the pursuit of both they enjoy self-determination. The transition then is from norms of dependence to norms of independence, and conflict may arise when parents are loath to relinquish the control they have so long exercised. This problem does not arise in societies characterized by cultural continuity in child-rearing practices, as in traditional China, where grown sons even after marriage continue to show filial piety and obedience to their fathers.

The play group of peers is a group of equals or near-equals whereas the parent–child relationship is one of superior and inferior. Accordingly, in the family situation the prospect is greater than in the peer situation that the relationship between members will be one of dominance and submission. Because the parent is bigger or superior or more powerful, he may dictate the behavior of the child; or because the parent is loving and indulgent, he may adopt a more permissive attitude toward his child's behavior, in which case the child may dominate the parent. Clinical studies [31] suggest that the child who is dominated and overprotected by his

[28] "The Death of the Hired Man." With permission of Henry Holt and Company, Inc.

[29] Bernard C. Rosen, "Conflicting Group Membership: A Study of Parent-Peer Group Cross-Pressures," *American Sociological Review*, 20: 155–161, April 1955.

[30] Ruth Benedict, "Continuities and Discontinuities in Cultural Conditioning," *Psychiatry*, 1: 161–167, 1938.

parents tends to become a submissive child, whereas the child who is overprotected but indulged often becomes rebellious. The play group of peers, on the other hand, emphasizes give-and-take. It values the child who can rough-house and hold his own, who is full of physical energy, who can participate in competitive sports. Because in the peer group the child generally associates with a larger number of individuals than just two parents, and because the members of the peer group tend not to idealize their members as do parents their offspring, the child usually gets from the others in his play group a more realistic judgment of himself than he does from his parents. The play group of peers may accordingly serve as a corrective for the errors of parents in dealing with their children.

The theory of differential association as an explanation of normal and deviant behavior. The substance of preceding paragraphs is that our conception of self is largely derived from the opinions of others. Others, therefore, have an important influence on our personality and behavior. Can we infer from this that our behavior is conditioned by the company we keep? In Chapter 9, where the role of the group was explored, it was indicated that individuals seldom rise much above or fall much below the level of the group. One criminologist [32] has taken this idea and based on it the theory of differential association as an explanation of deviant behavior. One important reason we have criminals, according to this theory, is that association with criminals begets criminals. There is a good deal of evidence to support the theory. Few crimes by juveniles are committed by lone wolves. Rather the delinquents usually work in groups. And association of young delinquents with hardened criminals in prison has been shown to be a potent reinforcement of criminal behavior in the young. The theory is deficient, however, in that it does not account for the fact that not all those who associate with criminals become criminals. Preferential association is also important, that is, the nature of the persons with whom we wish to associate; or — in terms of the earlier discussion — the persons who are "the significant others" in our lives. If an individual who associates with criminals does not regard his associates as significant, he will be less influenced toward crime.

Groups whose opinions we value become our "reference groups." A useful concept which has been introduced into social science to identify certain ones among "the influential others" is that of reference group, by which is meant the group from which we get our values, or whose approval we seek. The reference groups contrast with the membership groups, which are the groups to which we belong. A person may belong to a group without sentimentally identifying himself with it and accepting its values. So a person may associate with criminals without respecting them and sharing their values. The concept, reference groups, as distinct from membership groups, has particular relevance for modern, complex, heterogeneous society with its high rates of physical and occupational mobility, where a person may be a member of one group but prefer membership or aspire to membership in another. In a small folk society, the distinction between membership and reference groups is less common and may be nonexistent.

To whose judgment do we refer? As we have seen, others influence us, and "the significant others" influence us most. They influence us in two ways: they help

[31] D. M. Levy, *Maternal Overprotection* (New York: Columbia University Press, 1943).

[32] Edwin Sutherland, *Principles of Criminology* (Philadelphia: J. B. Lippincott Company, 1934).

to give us our conception of self and they help to give us our early values. Of the two, the former is more stable. Our values are more subject to change, especially if they are not "ego-involved" — that is, not tied in so closely with the self that an attack on the values is regarded as an attack on the self. Thus studies of college students show that they are generally more liberal in their attitudes at the close of their college course than they are at the beginning. Each student at Bennington College filled out several attitude scales each year for four years, and seniors were interviewed just before graduation. Most of the students were conservative on entering and the great majority, in the liberal atmosphere of this college, became appreciably more liberal. Factors which affected the outcome included the strength of the ties with home, the degree of identification with the college and the community, the success at college, and the time spent at

Personality types . . .

The self-centered. We are all self-centered, but the person who is called such has this trait magnified to exaggerated proportions. Noticeable is a lack of altruism. He cannot see through others' eyes and is tactless. He is bored easily because he is less interested in others than in himself. By nature he is not generous in expressing appreciation. The self-centered person needs especially the constraint of good manners. As a child, he probably identified himself little with others, had little experience in self-sacrifice that often comes in the give-and-take of association with playmates.

The gambler. Mischievous children under discipline learn to take risks. Risk-taking is also learned from other experiences. In some gamblers risk-taking is like a chronic disease, so great is its compulsive power. When indulged in for the excitement and thrill rather than being based on a sense of probabilities, the consequences become serious to the individual and sometimes to society. On the other hand, with some safeguard of probabilities, risk-takers have contributed much. They usually have more initiative than people of the cautious kind and sometimes succeed better than the judicious.

The rebel. Radicals are often recruited from the rebellious; and radicals have been useful in introducing the new and in fighting cultural lags. The rebellious are divisive, and are often trouble-makers in organizations. They are not easy-going and are sometimes given to butting their heads against stone walls. Though their journey through life is strewn with trouble, many have been agents of progress. Children are thought to learn rebelliousness as a reaction against domination, violent, intermittent, and unwise.

The leader. Leaders understand human nature and like to manipulate people. They often love power. They are authoritative, like dominant positions, and derive pleasure from recognition. Quick decisions, action, initiative, and aggressiveness are common characteristics. These traits are learned through early play experiences aided by physiological prowess or compensation for the lack of it. There are others (clinging vines) who by contrast like to be submissive, to look up to others. Leaders and followers are universal among mammals with good learning capacities. Leaders may be more important for group welfare than they are to freedom-loving friends.

college, as well as the nature of one's friendships. Those who stayed in college the shortest time changed the least.[33]

Our reference groups offer an important key to our personality and especially to our values. There are persons who say, "I don't care what anyone thinks." Insofar as this statement does not reflect merely a momentary feeling of pique or a temporary need to assert one's independence, but represents a chronic attitude, it is a serious one from the standpoint of society. This attitude characterized a group of juvenile delinquents who have been described in a book with a revealing title: *Children Who Hate*.[34] The book is dedicated to the group described, "to the children nobody wants." Without exception, these children came

[33] T. M. Newcomb, *Personality and Social Change* (New York: The Dryden Press, 1943).

[34] Fritz Redl and David Wineman (Glencoe, Ill.: The Free Press, 1951).

The masochist. The extreme of this type derives satisfaction in punishing himself, but there are very few extreme cases. The religious ascetic, frequent in Europe in the Middle Ages, was masochistic, as are those today who are extraordinarily self-sacrificing. They do not radiate happiness, though they seem to get satisfaction in being unhappy. In some cases masochistic spells are periodic. Little is known of how the masochist gets this way.

The narcissist. He is abnormally fond of looking at himself in the mirror or at his photograph and takes much interest in his apparel. Raw selfishness and love of power are not so common as emotional admiration of himself. He is likely to be more in love with himself than with another. As a love object he may be a disappointment though he is often eagerly sought by the love-hungry.

The sadist. This type delights in cruelty to others. He loves to punish and has little compassion for those he makes suffer. It is as though a curtain cuts off sympathy, if indeed it exists in significant amounts. There is no sharp dividing line between discipline and punishment. As administrators in prisons, or as officers in the army, sadists are a menace. To be married to one is most unfortunate, and under such a parent, children suffer.

The exhibitionist. He is a show-off, likes to be the center of attention, and is unusually fond of applause. He is more sensitive to the attention of others for the moment than he is to the enduring opinion of others. Extreme cases will perform absurd or eccentric acts to the injury of their reputations, so sweet is the immediate thrill of attention. Mild exhibitionism is found among trial lawyers, actors, orators, and preachers. Man is a peacock as well as a brute. Fond parents, by exhibiting their children or encouraging their display before visitors, help to develop this trait.

97 Personality Types

The eight personality types listed here differ from occupational types such as soldier, priest, salesman in that the traits of personality types are developed early in life and are less easily changed than the later-appearing occupational traits. They are little influenced by heredity but are rather the product of early social experiences. They are the outcome of relations of a child with its mother, its father, its brothers and sisters, and its playmates. They are group products. Those listed above are *ad hoc* choices from a much longer list. They are extreme developments of traits we all possess, latent or manifest, to some extent. They are undocumented, and the notations are those of the authors. These types are not laboratory or statistical discoveries but are the ones that the people recognize and name. They are the kinds of people one meets in life or in biographies and in fiction.

from homes where they experienced open brutality, cruelty, or neglect. Their frustration led to hostility so great that it was directed against all authority and against all those who tried to help them in the conventional ways that exist for trying to help such delinquents. The authors contrast the "complete" aggression of these delinquents with the episodic hatred of the middle-class child, which is auxiliary to his anxiety over his status, and the ambivalent feelings of love and hate which normal children have. We are told that these delinquents had not known even one adult with whom they had had a warm and satisfying relationship.

Whereas some children place no confidence in anyone, there are those at the other extreme who are sensitive to the opinions of so many others that we say they are highly sensitive to public opinion, to a kind of "generalized other." Such individuals are likely to be extremely conforming and conventional. It is interesting to speculate on how such attitudes are produced. David Riesman [35] has advanced the theory that an overriding concern for the opinions of many others arises when young children learn to be sensitive to their peers rather than to their parents. He calls such individuals who are preoccupied by a desire for popularity and whose contemporaries are their reference groups and principal source of direction, *other-directed. Inner-directed persons,* on the contrary, Riesman thinks, are those who test their behavior by specific ethical principles rather than by what others think. These inner-directed persons are said to have derived their goals from their parents, not their peers, and to have internalized these goals. It is not clear, however, why a child cannot learn from his parents to be very much concerned with popularity, if this is what the parents value. Nor is it clear why a growing child cannot learn from a peer — say a greatly admired friend — certain ethical principles which then help to give direction to his life. Still, in general, parents may be more concerned with principles, and peers with popularity.

The terms inner-directed and other-directed are somewhat misleading, since, as we have seen, all of us are other-directed, in the sense that others are the source of most of our values; we internalize the values of others. There is, however, considerable variation in the number and nature of "the others" in the lives of individuals, in the degree of identification and influence, and in the behavior that is learned from them. As Riesman points out, all people want to be liked by someone some of the time, but some people want to be liked by more people more of the time.

A crucial self-judgment is whether we think we are wanted by others. People vary in the nature and intensity of their reactions to frustration. Thus a child refused an ice cream cone may feel only the loss of the treat. But if he interprets the refusal as evidence that his mother does not love him, the consequences are more serious. Deprivation is more frustrating when it means rejection, inferiority, or lack of respect, when it becomes a threat to the personality. It leads to a sense of personal insecurity and lack of self-confidence.

Another important self-judgment is the result of disappointing or offending others whose judgment we value. When we love or admire someone, our desire is to please that person; consequently, it is disturbing to feel that we have, instead, offended or disappointed him. Such a feeling leads to a sense of shame or sin or guilt. Guilt feeling is, so to speak, the voice of conscience which in turn represents the incorporation into one's personality of the admonitions of those we respect most. Strong guilt feelings tend to lead to aggression against the self; that is, self-blame. A study

[35] *The Lonely Crowd* (New Haven, Conn.: Yale University Press, 1950).

of guilt in young boys indicates that boys with strong guilt feelings tend to express less overt aggression than boys with weak guilt feelings.[36]

Sociometry: measuring the acceptance or rejection of the individual by the group. The group does more than shape personality; it also evaluates personality, and the evaluation becomes in turn a factor influencing the personality. The group looks at its handiwork (or at that of other groups) and calls it good or bad, generally disclaiming any responsibility for the product if the verdict is negative. This role of the group as a selective factor in personality development has been dramatized by Moreno and his associates who have devised tests for measuring the acceptance or rejection of the individual by the group. In one test, each student in a class is asked to choose from among his classmates those whom he would want to have remain in the same classroom and sit near him. A number of students remain unchosen; they are the isolates on the fringe of the group. A number choose each other: there are mutual pairs, triangles, and chains. Other choices are not reciprocal. Those who are "overchosen" are the leaders. The measurement of such group relations has been called *sociometry,* and a diagram representing the configuration of attraction–repulsion patterns in a group, like the one shown in Figure 98, a *sociogram.* Such a diagram is more meaningful than, say, an alphabetical seating chart of the class. Many of the activities of the school, especially the extracurricular activities, are tied in with these ratings. In general, the most popular children show, in addition to good health and vigor, superiority in such traits as the tendency to conform, poise, initiative, adaptability, dependability, consideration for others, and originality.[37] Insofar as the children show these qualities when they enter school, the classroom serves mainly as a selective agent, but the selection is itself an important influence on personality if it reinforces existing traits. In other cases, of course, the evaluation of a child by his associates may be a factor in giving a new direction to his personality.

Sociometry: measuring roles in the group. Feelings of preference by members of a group for one another are not limited to general acceptance or rejection, for an individual may take a number of different roles in the group, each of which is evaluated. The test referred to earlier was one of liking or popularity, which seems to depend upon the ability to release tension in the group and to build morale. A well-liked person tends to be an expert in "expressiveness"; his skill is in the emotional aspects of interpersonal relations, since he establishes good feeling in the group. Investigations[38] of small groups involved in problem-solving show that there is in addition to the "best-liked man" the "idea man," an "instrumental" specialist chosen for skill in furnishing fertile ideas. There is also the leader who supplies the group with direction. In these studies, leadership was correlated more highly with guidance than with "being liked."

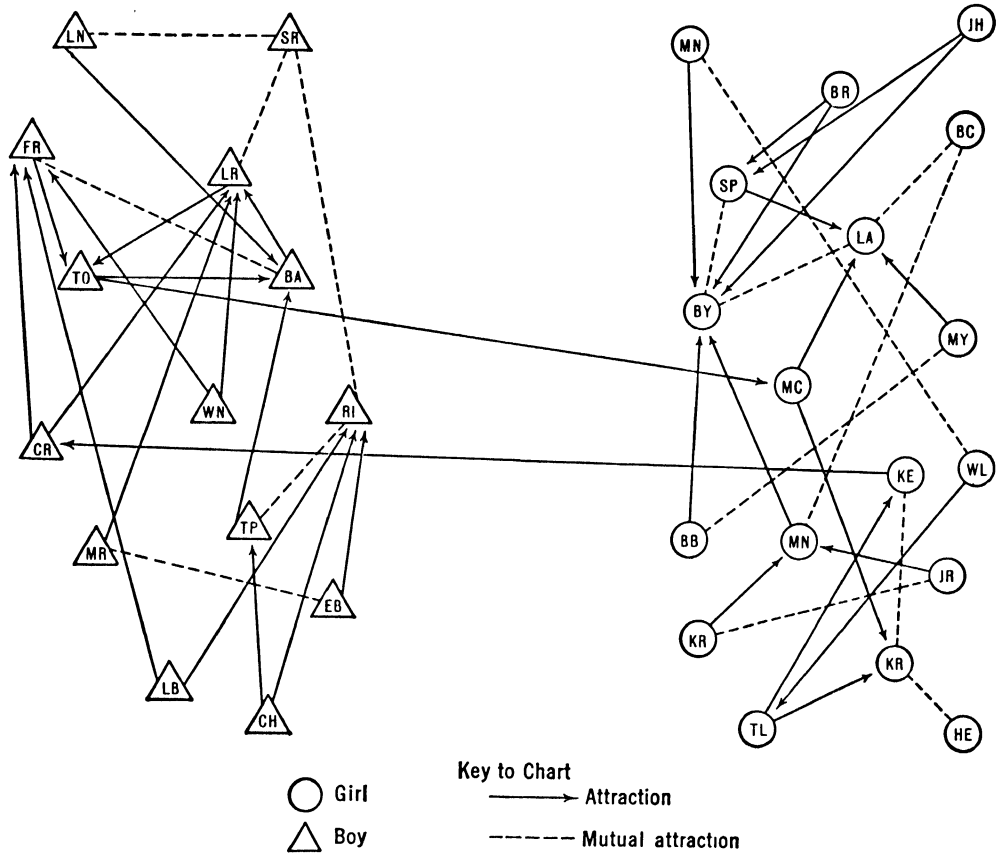
Self-chosen groups are more cooperative than groups not self-chosen. In an experiment[39] twenty groups of five children

[36] C. M. Heinicke, *Some Antecedents and Correlates of Guilt and Fear in Young Boys* (Unpublished doctoral dissertation, Department of Social Relations, Harvard University, 1953).

[37] Merl E. Bonney, *Popular and Unpopular Children* (New York: Beacon House, 1947). A five-year study of 150 school children. A large number of interpersonal choices were recorded each year and the children ranked according to a general index of popularity. The five most popular and five least popular were studied intensively.

[38] Talcott Parsons and Robert F. Bales, *Family, Socialization and Interaction Process* (Glencoe, Ill.: The Free Press, 1955), Chapter 5.

[39] Aileen D. Harding, *The Effect of Grouping by Sociometric Techniques on the Social Behavior of Children* (Master's thesis, The Florida State University Library, 1952).



CLASS STRUCTURE, 7th GRADE

14 boys and 18 girls. *Unchosen, 5:* WN, CH; LB, JH, BR; *Pairs, 15:* LN–SR, SR–LR, SR–RI, FR–BA, RI–TP, MR–EB, KR–HE, KR–JR, KR–KE, BB–MY, WL–MN, MN–BC, BY–LA, LA–BC, BY–SP; *Stars, 5:* LR, RI, BY, LA, FR; *Chains, 2:* SP–BY–LA–BC–MN–BY, LN–SR–RI–TP–BA; *Triangles, 0; Inter-sexual Attractions, 2.*

98 Sociogram of the Seventh Grade, Public School 181, Brooklyn

The diagram represents the preferences expressed by a group of school children for one another and shows how popularity is distributed in the group. Popularity is a function of group values and has important consequences to personality. (From J. L. Moreno, *Who Shall Survive?* Washington, D.C., Nervous and Mental Disease Publishing Company, 1934, p. 41. With permission.)

each were observed for five weeks. Ten groups (the experimental groups) comprised children who had expressed mutual choices for each other. The ten control groups consisted of children who had not. The children ranged in age from five years and three months to six years and three months, and engaged in activities such as clay modeling and finger-painting. The children in the experimental groups made significantly more responses than the control groups indicating cooperation, initiative, and friendly conversation, whereas the control groups excelled in seeking assist-

ance, demanding behavior, show-off behavior, and aggression. This experiment and others reporting similar findings raise interesting questions about social policy. Should democratic or aristocratic grouping be encouraged? For example, in accordance with democratic tenets, should the seating of children in a classroom be alphabetically arranged, or should it be determined by the preferences of the pupils? Should classes be self-chosen groups of congenial persons? There is a gain in morale and in achievement among the chosen, but what of the rejected? The problem, of course, involves values besides those of in-group morale and achievement; but the advantages of the self-chosen group for certain purposes make understandable the widespread appeal of such voluntary congenial groups as fraternal organizations and cliques.

SUMMARY

Since man is social and lives in groups, the group is an important factor in the development of personality. The personality of the individual is shaped fairly definitely during infancy and childhood, and to some extent during youth, mainly in the intimate associations of the family, play groups, and local neighborhood. These experiences have a cultural component; hence culture is an additional factor in shaping personality, and the group acts as a carrier of the culture. The group and culture are inseparable in human affairs; but they are two factors, not just one, and we therefore have here a problem in the distribution of emphasis. If we are interested in assessing the relative roles of interpersonal relations and cultural norms in behavior, then we may observe that the group influences bulk large during early childhood. These early influences are prominent in establishing what is commonly referred to as the basic personality structure. The child, being immature, cannot grasp very well the cultural teachings, although he is very sensitive to the emotional reactions of the individuals about him toward himself. As an illustration, where there is a tradition of race prejudice in a community, little children of different races play together freely unless prevented by adults from doing so. Whether a potential playmate is a bully or a buddy matters more to the young child than the cultural norms on the etiquette of relations between the races. Later on, the norms prevail.

The infant, needing affection and protection for survival, seeks first to identify himself with his guardians, and then as he matures, with a succession of other groups. Because he wishes to be accepted and esteemed, the response he receives from others influences greatly the traits of personality he develops. Acceptance by the group is an organizing force in personality; rejection by the group, a disorganizing influence. The idea of self develops in relation to others who are viewed as critics and is therefore a reflection of the ideas of others. Skills and traits are acquired through imitation of others, by taking the roles of others. As the principal motivating and socializing forces, the group employs praise and blame in their multifarious forms.

Some critics and judges are more highly valued than others. The "significant others," with whom the individual has a relationship of affection or respect, exert the greatest influence over behavior. The persons whose judgments are valued constitute "reference groups" for the individual who values their judgments. In modern heterogeneous society, a person may belong to one group but use another of which he is not a member as a reference group. This possible disparity between membership and reference groups helps to explain why some individuals who are reared in anti-social groups do not become delinquents, and vice versa.

QUESTIONS FOR DISCUSSION

1. What are the interrelationships of group and culture? In what ways are these two phenomena different?
2. Why is an understanding of a person's life situations necessary to an understanding of his personality?
3. What would Anna's achievement have been, had she been reared in a normal environment?
4. How is the development of the idea of *self* in a child dependent upon the opinions of others?
5. What are the advantages and disadvantages of instinctive behavior?
6. What is "basic character structure"?
7. How is "role-taking" different from "role-playing"?
8. How are social roles related to personality?
9. What part does the desire for social status play in the formation of personality?
10. What are similarities and differences between peer-group and parent–child relationships?

TOPICS FOR REPORTS

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2. G. H. Mead, *Mind, Self, and Society.* Chicago: The University of Chicago Press, 1934.
3. John Dollard, *Criteria for the Life History.* New Haven: Yale University Press, 1934.
4. H. G. Wells, *An Experiment in Autobiography.* New York: The Macmillan Company, 1934.
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6. Relative efficiency of praise and blame as means of social control.
7. The personality of adopted children.
8. The theory of differential association as a factor in crime.

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An excellent exposition of the development of personality in terms of the celebrated "four wishes."

11

Culture and Personality

A traveler[1] crossing the narrow English Channel is impressed by the contrast between the stolid, casual British tars who load the boat at Dover and the animated, excitable Frenchmen who unload it at Calais. Another observer[2] notes German children playing war and developing militaristic traits, even after the defeat of the First World War and before Hitler, while Mussolini fails to build up soldierly qualities in the Italian people. The Japanese,[3] with their sense of obedience to the law, after their surrender in World War II cooperated fully with their conquerors, but the near-by liberty-loving Koreans for years defied their Japanese conquerors.

It will be noted that the previous paragraph is concerned with personality traits that distinguish the members of one society from another. The contrasts are stated in extreme terms, as between the stolid British and the animated French. In reality there are degrees of stolidity and animation, and some Frenchmen are more stolid than some Englishmen. If the traits were measured and plotted on a graph, the two curves would overlap. The situation may be like the widely held stereotype of the Swedes as tall, fair, blonde, and blue-eyed, whereas actual measurements show that only about 30 per cent of the Swedes have all four characteristics and the rest are mixed types. Ideas about national personality traits are generally based on limited studies in local communities which may not be typical of the whole society[4] or are impressionistic and not based on measurements.

The central problems of culture and personality are two: how to account for the characteristic differences in personality as between societies; and how to account for the variations in personality within a given society.

DIFFERENCES IN PERSONALITY BETWEEN SOCIETIES

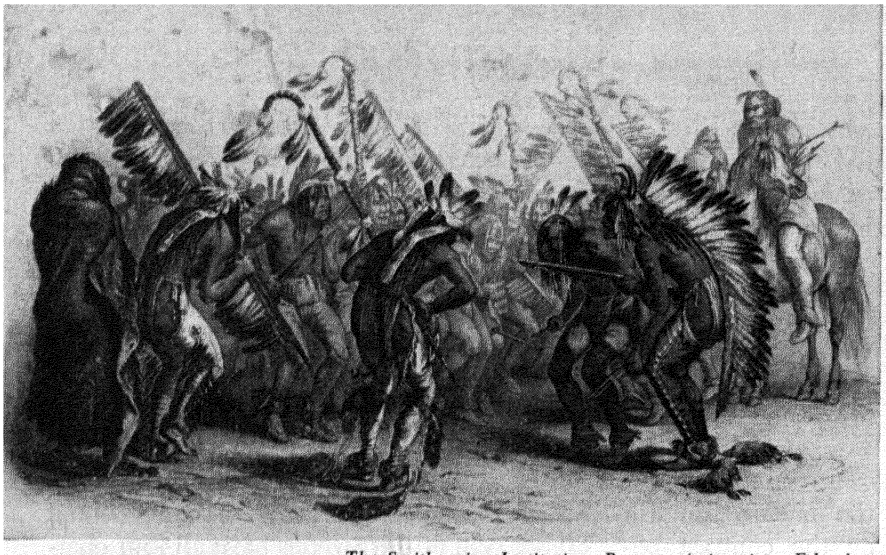
The variations in personality traits as between societies are of cultural origin. How account for the differences indicated in the first paragraph? It is unlikely that racial factors are involved, for we have instances above of national groups, belonging to the same race, showing different traits. We know also that children transferred from one group to another, even a radically different group, readily adopt the characteristics of the new group. The personality traits of different national groups are manifestly of cultural origin and are learned.

[1] Gardner Murphy, *Personality* (New York: Harper & Brothers, 1947), p. 763.

[2] Kurt Lewin, "Cultural Reconstruction," *Journal of Abnormal and Social Psychology*, 38: 166–173, April 1943.

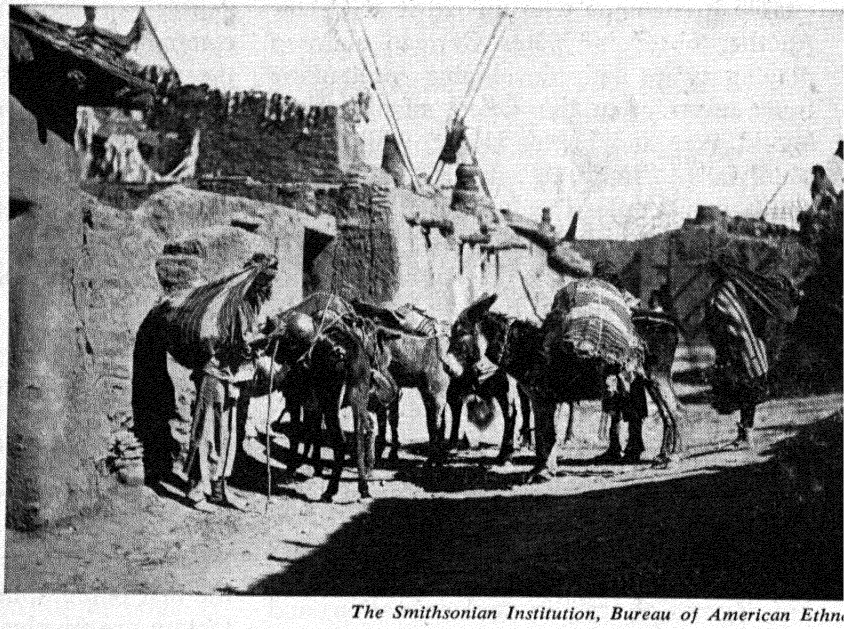
[3] Ruth Benedict, *The Chrysanthemum and the Sword* (Boston: Houghton Mifflin Company, 1946).

[4] John Gillin, "National and Regional Cultural Values in the United States," *Social Forces*, 34: 107, December 1955.



MANDAN

The Smithsonian Institution, Bureau of American Ethnology



ZUNI

The Smithsonian Institution, Bureau of American Ethn

Conversely, groups representing different racial stock may show the same traits: the Japanese were regimented, soldierly, and fond of authority, much like the Germans.

The scientific study of national character is relatively recent. For many years anthropologists concerned themselves much with the formal organization of different cultures, little with the way culture influences personality. Psychologists, meantime, largely confined themselves to the study of behavior in the standardized laboratory, shutting out the highly significant environmental influences. Lately the anthropologists have discovered personality, and the psychologists culture; and the two disciplines have begun to collaborate profitably on the problem of the interrelationship of these two factors. The sociologists have also made a contribution, especially in their analysis of the bearing of social status, social role, and social change on personality.

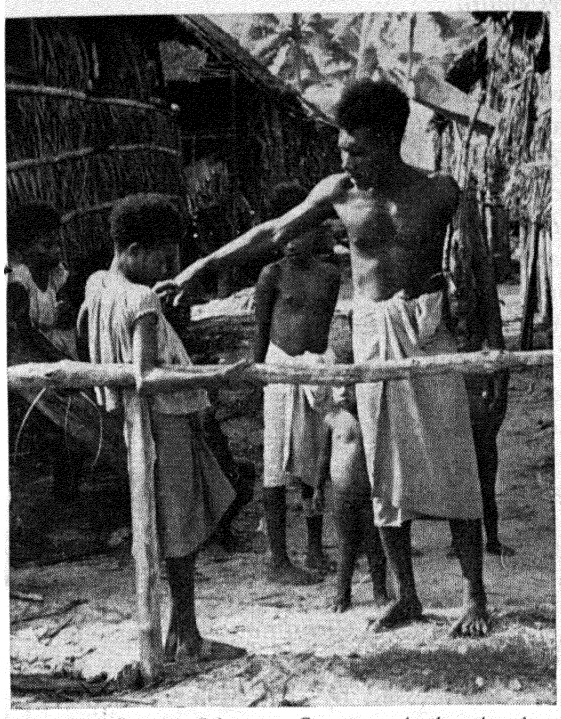
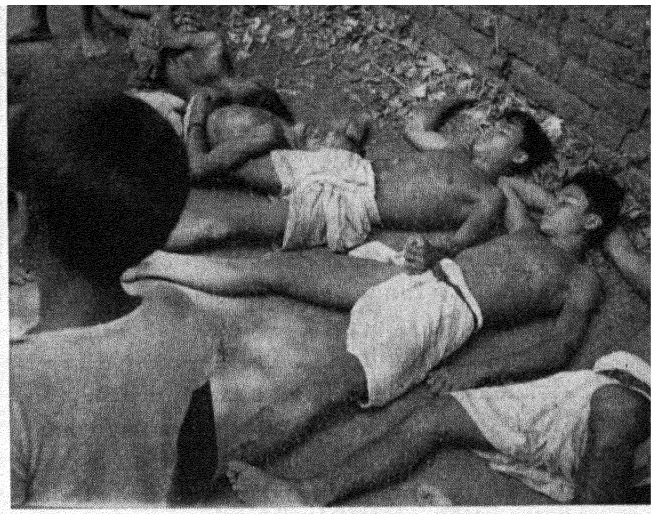


Photo by Lenora Schwartz, Courtesy of the American Museum of Natural History



From Balinese Character, A Photographic Analysis, *by Gregory Bateson and Margaret Mead, Special Publications, Vol. II, The New York Academy of Sciences, 1942.*

BALINESE

MANUS

99 Personality in Different Societies

The differences in personality traits between members of different societies are wholly of cultural origin. The militaristic Plains Indians enjoyed combat because of the personal prestige it might afford, whereas the peaceful Pueblo Indians eschewed fighting and gained favor through cooperative economic and religious activity. Shown on page 274 are Carl Bodmer's drawing of a war dance of the Mandan Indians — a typical Plains tribe — done in 1833; and a photograph of Zuni Indians at their pueblo.

Among the Manus, rivalry is commonly manifested in argument over economic interests; the picture shows an adult scolding a child thief. In contrast, when under stress, the Balinese withdraw into a trance-like state. Shown above are some young Balinese in trance laid out in the temple to wait for holy water. These differences in personality traits are differences of degree, not of kind; yet the differences may be substantial and significant.

Technology and Personality

Students of culture and personality have concerned themselves mainly with the relationship of non-material culture (especially values) and personality but little with the relationship of material culture and personality, even when material culture is an important factor in producing the values. Yet it can be shown that the material products of culture call forth reactions that affect personality.

Timepieces promote punctuality. Inventions such as the watch and the clock encourage the habit of punctuality. The American Indians who have no clocks or watches in their culture have little notion of keeping appointments with any exactness, whereas commuters working in any large city have a very acute sense of time. Appointments are regulated with precision, and daily schedules are laid off in units of time. Variations in hours or days may take place in keeping

appointments among peoples without timepieces. We say they have no sense of time. Why primitive peoples have little use for punctuality and why it is so important in modern civilization depend on many factors other than the watch, of course, but promptness is in general a reaction to objective products of cultural life. Modern culture is loaded with tools like the radio, the railroad, and the timeclock — all demanding punctuality of those who use them. The personality of an American Indian differs from that of a white man in the matter of punctuality, and this difference is a consequence of differences in their cultures.[5]

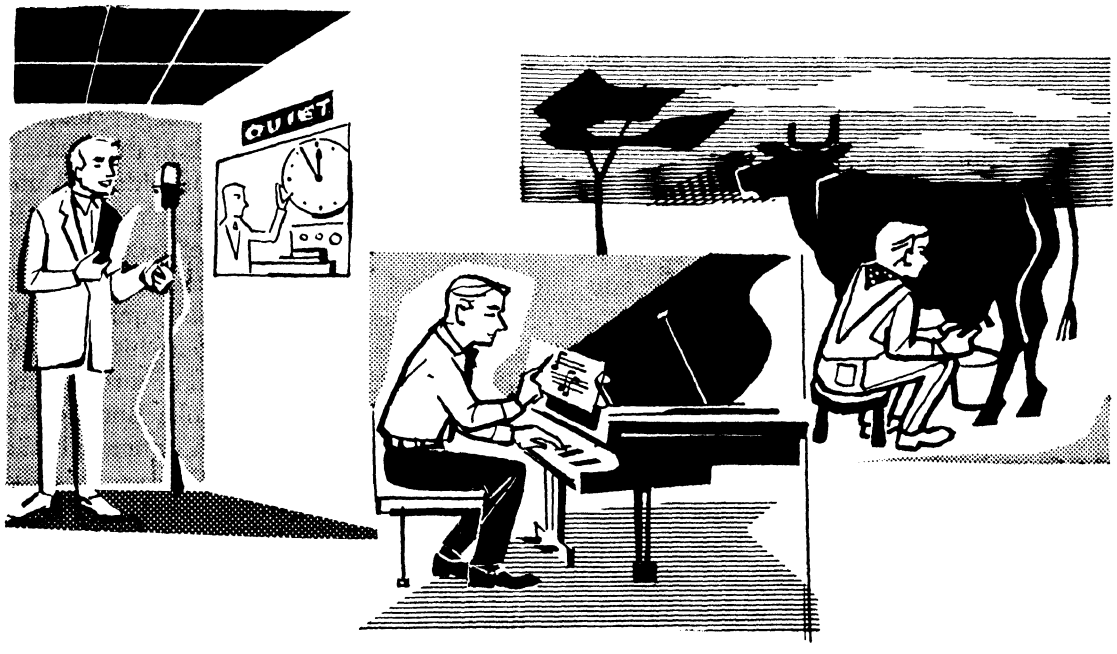
Yardsticks encourage exactness. Many people with a rudimentary culture also lack precise units of measurement of distance. How does this affect their perceptions? Sherif [6] describes the situation among the relatively isolated mountain village people of Karlik in the western interior of Turkey. Most of the inhabitants have never been farther than Suhut, a larger village about five kilometers distant, which is reached on foot or by donkey. The people of Karlik indicate distance up to three or four kilometers by such expressions as: "within a bullet's reach," "as far as my voice can go," and "as far as it takes to smoke a cigarette." Exact standard units of distance are not used. Longer distances, for example, 50 kilometers, will be expressed as: "You start early in the morning and reach there by sunset." The estimate of distance is made in terms of the time the trip will take on foot. The distances to remote places reached by train are figured in terms of the number of days and nights required. Consequently there is frequent distortion of distance, and more remote places reached by train are thought to be closer than near locations reached mainly on foot. Translated into psychological terms, we say that where, as in Karlik, a measuring stick is not used, it is more difficult for one to be exact (to have the personality trait of exactness) than when one can say that the distance between two given points is 100 meters. Modern culture is rich in standardizing instruments, which help to cultivate the trait of exactness.

Plumbing is a factor in cleanliness. Another illustration is the relation of plumbing to cleanliness. Cleanliness is a personality trait which is greatly valued by our culture, as witnessed by the saying: "Cleanliness is next to godliness." It is, however, a trait which is greatly encouraged by the technology of plumbing and other inventions that are found with it. No doubt some peoples are cleanly without the benefit of modern plumbing, in which case other conditions are favorable. The Eskimos are dirty; but when one considers that the Eskimo has to hang a bag of snow down his back to melt it in order to get water, one sees that it is not so easy to be clean as when one has only to turn on a faucet of hot or cold water and reach for the soap. In comparing peoples, therefore, cleanliness is seen to be a matter not of heredity but of the type of culture. Within a culture there may be some hereditary basis for variation in the tendency to be clean, but generally the variation is a function of occupation, or wealth, or some other culture trait.[7]

[5] A. Irving Hallowell, "Temporal Orientation in Western Civilization and in a Preliterate Society," *American Anthropologist,* 39: 647–670, October–December 1937. See also W. F. Cottrell, "Of Time and the Railroader," *American Sociological Review,* 4: 190, April 1939: "Co-ordination in time takes its toll from all of us but probably among few other classes is it so complete and coercive as among railroaders" (p. 195).

[6] Muzafer Sherif, *An Outline of Social Psychology* (New York: Harper & Brothers, 1948), pp. 375–378.

[7] We ordinarily think of the English as a cleanly people, but before the advent of modern plumbing and sanitation, conditions in England were such as scarcely to justify the use of this adjective. "Every writer during the fifteenth and sixteenth centuries who makes his comment on the customs and practices of English life, adverts to . . . the extraordinary



100 Timepieces and Punctuality

The environment which influences human personality includes the material as well as non-material products of culture. All things equal, the trait of punctuality will be more common and pronounced in cultures with timepieces than in cultures without timepieces. Within a society, punctuality varies according to occupation and the influence of timepieces therein. Few, if any, occupations are governed by the clock more than radio and television announcing, although whether announcers are also more punctual in other situations is not known. On the other hand, the music composer usually works without much regard for the clock, although he may have to follow a schedule on occasion or meet a deadline. The farmer's occupation is intermediate in its organization according to the demands of time. If he has livestock (a part of culture as a result of man's discovery of how to domesticate animals), he must look after them according to a schedule — not as rigorous a schedule as the radio announcer's, but not as flexible as the composer's.

The Romans carried further the Greek cult of the body by building enormous public baths; but the early Christians, reacting against the pagan religion of the Romans, repudiated also many other traits of the culture, including baths which they believed indulged the flesh instead of saving the soul.[8] This attitude continued throughout the Dark Ages and the early Middle Ages, moderated somewhat from the 13th to the 15th centuries, and then was renewed in the 16th century. The Crusaders must have seemed an unwashed barbarian horde to the oriental

uncleanliness of their habits and persons. The floor of an ordinary Englishman's house, as Erasmus describes it, was inconceivably filthy, in London filthier than elsewhere. . . . The streets and open ditches of the town were polluted and noisome beyond measure. The Englishman disdained all conditions of health." J. E. Thorold Rogers, *Six Centuries of Work and Wages* (New York: G. P. Putnam's Sons, 1884), p. 118.

[8] S. Giedion, *Mechanization Takes Command* (New York: Oxford University Press, 1948). In Part VII, pp. 628–721, there is a very interesting account, profusely illustrated, of the habits and conditions of bathing and cleanliness.

Saracens.[9] This phase of our culture history was terminated by the growth of enlightenment, the increase in wealth, and the rise of the middle class which brought the scrubbing of Dutch doorsteps and the portable bath of the Englishman. The ascetic idea that too close attention to the flesh jeopardizes the soul is not conducive to great cleanliness. Suitable technology is conducive to cleanliness, but to be effective the technology must have favorable ideological support.

Non-Material Culture and Personality

The values of a society that affect personality are not always derived from technology. Religion, art, philosophy, law, and custom also furnish values which influence personality. Since these values differ from society to society, members of different societies, in general, show differences in personality.

Spartan physical fortitude and Athenian love of beauty. Sparta and Athens were rival city-states with dissimilar values. Since they were rivals and fought wars, children growing up in both cities were taught to be patriotic and brave. But the emphasis in Sparta on the military virtues was very much greater. In Athens a growing boy was taught the love of knowledge for its own sake as well as for the presumed discipline of the mind. Thus he would be taught to enjoy problems in geometry. He was also taught the love of art and given to understand the rules of pattern and proportion that govern beauty. Physical exercise was emphasized for its own sake, and for excellence in performance, as in the Olympic Games. The Spartans, on the contrary, stressed physical culture for military purposes. The education of the growing boy was primarily designed to produce the courageous warrior. Not because of need, but as discipline, he would be required to steal bread in order to eat; and to develop ingenuity he was taught that it was disgraceful to be caught stealing. He was told the favorite fable of the Spartan boy who had stolen a fox and hidden it under his coat. As he was leaving, he was stopped by an elder who engaged him in conversation. The boy stood his ground, giving no evidence of his theft, until he fell dead, the fox still gnawing at his entrails.

Physical courage, although of a more limited sort, is also taught in Molar Bund, a village near New Delhi, India, where all the boys are required by the culture to become snake-charmers (see Figure 101).

Kwakiutl competitiveness and Zuni cooperation. Another illustration of differing emphases in values, with important consequences for personality, is provided by the Kwakiutl Indians of the Pacific Northwest and the Zunis of the Southwest. The Kwakiutl emphasize rank and prestige. Rank is validated and enhanced by the distribution of property, by giving great feasts during which large amounts of valuable candlefish oil and other materials are destroyed, and by vanquishing a rival of equal rank. The latter feat is attempted at the famous potlatch ceremony, where a man offers his rival property in the form of blankets and copper plates worth thousands of blankets. The property thus offered must be accepted by the rival and returned with 100-per-cent interest within a year, or the rival will suffer shame and loss of prestige. An element in the personality of the Kwakiutl may thus be said to be competitive self-glorification.

The Zunis, on the contrary, play down competitiveness and stress cooperation instead. This is illustrated by an experience reported by an American teacher in a school for Zuni children operated by the federal government on the Zuni reservation. The teacher was new and not familiar with Zuni folkways. She sent her pupils to the black-

[9] A. L. Kroeber, *Anthropology* (New York: Harcourt, Brace & Co., Inc., 1949), pp. 600 ff.

COBRAS AND VIPERS TOYS TO INDIA TOTS

All Boys Must Take Up Snake Charming Art as Profession In Village Near New Delhi

NEW DELHI, India (UP)—In the dusty village of Molar Bund, about fifteen miles from here, children fondle deadly cobras and vipers instead of the more conventional juvenile playthings.

For Molar Bund is a community of snake charmers, and every male offspring is taught the centuries-old art of handling some of the most poisonous reptiles in the world almost from the time he can walk. Standard adornments in every family hut are wicker baskets of assorted writhing snakes that are used for training.

When a boy is old enough and has acquired sufficient skill, he is sent out into the world with a bag of snakes and musical instruments to earn his living in the cities of India. Only the failures and the women remain in Molar Bund.

The art of charming, according to the head charmer of the village, involves more than merely blowing a gourd flute. Among other things, an apprentice must learn how to catch a snake in the field, how to keep him contented in captivity and how to mix a quick antidote for bites that sometimes can mean death within a matter of minutes. The learner also must be adept at extracting venom.

Removes Sac of Venom

This last operation was demonstrated by the head charmer, an old man with dots of gold inlaid in his teeth. First he stripped the wrapping of damp rags from a round basket and raised the cover. Coiled inside was a 5-foot cobra, greenish-gray on top and light yellow underneath, that had been caught the day before.

As its head swayed up and out of the basket, the old man grasped it just behind the eyes with a thumb and forefinger. With a tiny knife he made a deft cut near the inner angle of the jaw and scooped out a pale sac about the size of a pea. During the operation the snake kept up a steady hissing, but was powerless in the strong grip of the Indian.

A circle of teen-aged apprentices sat on the ground playing fat gourd flutes, home-made zithers and drums built of wood and rubber inner tubes. They wore dirty turbans of many brilliant colors and their ears were pierced with ivory rings.

Near by, in the shadow of a hut, a dozen or more snakes were feeding. Some lay half submerged in huge flat pans that contained a thin mixture of milk, water and meal. Two boys kept an eye on them.

Wraps Snake Around Baby

There were cobras, vipers and one snake as fat as a man's biceps that looked like a python. Not more than ten feet away, a naked, fly-tormented baby boy sat crying in the mud doorway of the hut.

The head charmer gathered the big snake around his shoulders, walked to the hut and folded the great coils around the baby's knees and stomach.

The brown tot bawled louder than before, but when the snake's head swayed up inquisitively, flicking a dark tongue at the infant's mouth, he stared fascinated. Then he reached out two chubby arms, patted the heavy coils with tiny fists and grinned with delight.

The old man watched solemnly, nodding approvingly. In a few years this boy would be handling reptiles like a veteran after which he would seek his mark in the world, another "graduate" of India's snake-charming village.

101 **Snake-Charming as a Compulsory Vocation**

(From a United Press dispatch in the *New York Times*, June 4, 1949.)

board to work some problems in arithmetic and asked that, when they finished, they turn around and face the class. After a time she noticed that they were all making very slow progress and were looking out of the corners of their eyes to see how the others were getting on. No one wanted to be the first to finish. In Zuni culture it is not regarded as proper to set oneself off against the group. One does not work for oneself but for the family, the clan, the association, or the village. There is little emphasis on the private accumulation of property. All the men in a matrilineal household work together in the fields, and the food is pooled in a common storehouse. Should wealth be accumulated by someone as a result of special circumstances, it is redistributed at the winter festival of the Shalako, for the collective good; that is, to win the favor of the gods for the group as a whole.

Among the Zuni, a person may have in his possession hundreds of ceremonial objects and masks, yet they represent no value to him whatsoever if the whole village does not freely use them. On the contrary, a Kwakiutl has a vested interest in his ceremonial prerogatives; and they may not be exercised by anyone else as long as the owner lives. The Kwakiutl occasionally resort to murder in order to appropriate another man's honors.

Culture Patterns and Personality

The discerning reader has no doubt made certain reservations concerning some of the relations between culture traits and personality indicated above. As for the connection between timepieces and punctuality, for example, it may be observed that the possession of clocks does not guarantee that their owners will be on time for engagements. The Latin people have timepieces, but they are not always so prompt as North Americans. When a Mexican makes an appointment with an American to meet at ten o'clock, he may ask if it is to be *hora inglesa* or *hora mejicana.* If it is the latter, he may start out for his appointment at 9:30, meet a friend en route, and invite him to have a cup of coffee at one of the many cafes; this done, he may proceed, only to meet another friend, of whom he inquires at length about the health of his family. When the Mexican arrives for his appointment, it is 12 o'clock. Hospitality and friendship mean more to the Latin people than punctuality in keeping appointments. This example shows that although material inventions as such may have significance for personality, the direction and degree of this significance depend upon the cultural situation as a whole. That is, there are several factors causing a personality trait, of which material culture is only one, though on occasion a very important one. It is helpful to go beyond individual culture traits and consider the relation of personality to the larger aspects of culture which are known as culture patterns.

Some rural cultures foster hospitality. A good example is the personality trait, generosity, and its counterpart, stinginess. These traits would seem to be more inherent in one's personality, perhaps, than cleanliness or punctuality, but they can be shown to flow from culture. Farming cultures a hundred years ago had developed a high degree of hospitality. This was true, for instance, of the plantation life of the old South. The distance between plantations was great; there were very few taverns or inns. Travelers were expected to stop overnight in private homes. They were welcome because food was plentiful and money as a medium of exchange was not in great use. Moreover, since communication facilities were poor, travelers were relied on for news. Under such cultural conditions it is natural that hospitality should be highly developed. It is much the same in primitive society. A person who shuts his door on a friendly traveler

is almost unknown among preliterates.

In a modern city the situation is different. There are plenty of hotels and restaurants. Space is at a premium in an apartment house. Food is not taken from the garden but must be bought. There is a plethora of agencies for the dissemination of news and a multitude of interests and activities for one's time. Hence, hospitality does not flourish in modern cities as it did in the old South.[10]

Women's occupations formerly encouraged obedience. Another illustration of the influence of culture on personality is the relationship of men and women. In the late 1880's, a young woman's memory book popular in the schools of that day contained, among such questions as "What is your favorite flower?" and "What is your favorite poem?" this query, "What is your favorite trait in a woman?" By far the most usual answer was obedience. Today, not one college woman in a thousand would give this answer. Among school girls today, self-expression and initiative are probably valued more highly than obedience. Why this difference? In the earlier period, farming was the principal business. Women generally had no occupations outside the home, nor was there outside employment beckoning them; they were therefore economically dependent upon their fathers and husbands. Obedience was a natural consequence of such conditions. At the present time, millions of women work for pay, and they are not employed by members of their own family. They can go to school on more nearly even terms with men. They may vote and hold public office. They may remain unmarried and live alone without incurring public censure. These are only a few of the cultural conditions which encourage attitudes of independence in women at present.

It is not to be assumed, of course, that all females living in the latter part of the nineteenth century were equally submissive. There were, no doubt, marked individual differences. How these may be accounted for has already been suggested in part in the preceding chapter, and will be considered further below. In addition, some discrepancy is always to be found between theory and practice; for even when the folkways favor the trait of submissiveness in women, real-life situations are often such that, for instance, a good many women have husbands whom they dominate. But the point to be emphasized is that several generations ago, obedience on the part of a young woman was both more widespread and more pronounced than it is today.

Can Societies Be Psychologically Typed?

The question may be raised whether it is possible to identify the influence of the total culture on personality, rather than the influence of segments only. Since cultures are unique, Benedict[11] thought it possible to characterize them as wholes in terms of their ethos or distinctive feeling tones. Two such types she identified as *Dionysian* and *Apollonian,* borrowing the terms from Nietzsche. The first, like the Greek god of wine, is impulsive, violent, self-assertive, outgoing, dominated by strong feeling; the second is poised, restrained, serene. Benedict applied the term Dionysian to the Indians of the Great Plains (such as the Sioux, Crow, Dakota, and Blackfoot), while the Indians of the Southwest were designated Apollonian. Each Dakotan sought his own "vision," sought to make individual contact with his guardian spirit, going without food or water

[10] An interesting note here is the lag of the hospitality pattern in the South. As families moved into the developing cities, their relatives and friends expected to be put up and fed as they had been in the country, and they came for long visits. The city family was torn between the old habits of hospitality and the economic burden of the visit under city conditions.

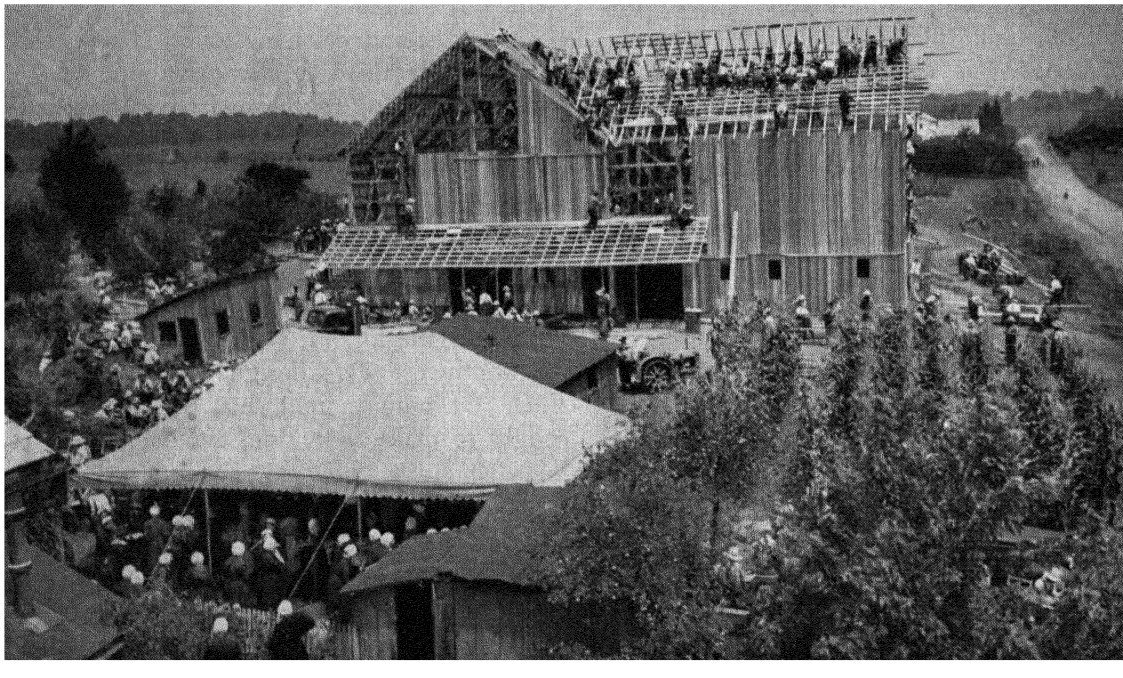
[11] Ruth Benedict, *Patterns of Culture* (Boston: Houghton Mifflin Company, 1934).

to achieve this end; men danced until exhausted or passed wooden skewers through the muscles of the chest and hung suspended in the sun. In ceremonial dances, drugs and intoxicants were used to induce extreme ecstasy and frenzy. The Zuni, on the other hand, were gracious and calm, maintaining control even in the exciting ceremonial dances. Personal ritual was subordinated and priests interceded for the individual, in religious matters. The emphasis was on the group, not the individual, and the group frowned on anyone's trying to exalt himself above his fellows. Here, then, are said to be two types of culture with distinct psychological emphasis, producing contrasting psychological types. The Plains Indians were more restless, daring and selfish than the Zuni.

The designation of cultures, even primitive cultures, as distinct psychological types has been criticized as oversimplification. Is a single label sufficient? Is it enough to tag the Dobuans as *paranoid* when they are also said to be acquisitive? A single label is perhaps justified when a culture is so dominated by a given trait that it overshadows all other traits; we use the term *paranoid* under these conditions to describe the individual, despite the fact that he has other traits. But then how designate the cultures that are better balanced and that lack special or extreme emphases? It is more accurate to consider cultures as differing in degree in respect to common personality traits than to view cultures as producing mutually exclusive personality types. Personality differences are those of "more or less," not those of "all or

102 Cooperation Among the Amish

Since they teach "Be ye not unequally yoked together with unbelievers," the Amish, a religious sect, resort to cooperative labor among themselves when the need arises. Like a society without money, they use giving and receiving of services as a medium of exchange. The Amishmen below are helping a neighbor to build a barn, but on other occasions the neighbor will be expected to reciprocate. The women cooperate in preparing meals. Economic activity in this setting has a satisfying informal social aspect. Is the Amish culture Apollonian? (Photograph from Wide World.)





103 Competition for Success: The Race to Take up Free Land in Oklahoma in 1893

There are no more free lands or Klondike gold fields, but cities like Houston, and new inventions like television, offer bigger prizes to the winners, prizes for which we still struggle with the fierceness of the riders in the picture above. But many are losers, and one psychiatrist claims that competitiveness has been a factor in every neurosis she has treated. No country and no culture, it is agreed, has ever emphasized competition as has America, with its rapid change and rich rewards. Is American culture Dionysian? (Photograph, courtesy of the Oklahoma Historical Society.)

none." Culture traits may be discrete variables but personality traits are continuous. While one culture may have plumbing and another not, cleanliness is a matter of degree. Suicide and the use of intoxicating liquors, present in so-called Dionysian cultures, may be absent from Apollonian cultures, but strong emotions in the latter find other outlets. The relatively mild Pueblos have dances like the Scalp dance which are only somewhat more subdued than the cannibal dance of the Kwakiutls. These observations apply even to the simple cultures of primitive peoples. When we turn to modern cultures, the problem of psychological characterization is much more complicated. It is more difficult to speak of the ethos of the United States with its heterogeneous and dynamic social organization than it is of the homogeneous, slowly changing culture of the Zuni Indians.

Basic Personality Type

A further interesting line of inquiry has to do with the role of the culture in producing the basic personality traits which dispose toward adjustment or maladjustment. Since the emotional attitudes that make an individual happy or unhappy, well adjusted or ill adjusted, are generally developed early in life, attention turns to an investigation of the family patterns prevailing in the given culture. Special note is taken of the code of infant care, particularly as to whether (1) there is care or neglect; and if the former, then (2) whether the discipline governing sex, elimination, weaning, and kindred mat-

ters is rigid or permissive. According to whether it is the one or the other, there results, say the psychiatrists, a weak or strong ego. As an illustration the Marquesan Islanders are cited.[12] In this society there is, for reasons not specified, a great shortage of females, which leads to intense competition for them on the part of the males. As a result, the females overplay the sex functions and underplay their maternal roles. There is little or no breast feeding; instead the mother prepares a doughy paste, lays the infant on its back, drops some of the paste on its mouth, and lets the baby gulp or swallow what it can; the further care of the infant is relegated to secondary husbands. The maternal rejection leaves the child anxious and insecure. He does not know why he is nervous; his anxiety develops as a generalized effect which is later transferred in part to food, supernatural beings, and other objects. The basic personality structure — the product of family patterns — in turn influences the pattern of folklore, religion, and other institutions.

Since this pioneer analysis by Kardiner and Linton, a growing number of comparable field studies have been undertaken to test the hypothesis of the differential effects of varying patterns of infant care on personality. This trend in research in cultural anthropology is significant, for previously the broad generalizations were insecurely based on the uncorroborated reports of a single investigator. In the main the new studies support the Kardiner–Linton formulations. Thus DuBois' study[13] of the people of Alor in the Dutch East Indies traces the disorganized personality of the typical adult mainly to the negative, inconsistent discipline, and to the lack of any sure source of love and security in childhood. An interesting feature of this study is a set of thirty-eight Rorschach tests of the natives which when analyzed by an independent specialist gave results supporting DuBois' analysis.

The usual situation among preliterates and literates alike, very different from that of the Marquesans or the Alorese, is for mothers to show affectionate interest in their offspring. In a sample of 75 primitive societies, the most characteristic mode of treatment of young infants was found to be indulgence.[14] The Navaho[15] mother nurses her baby whenever he cries, not according to a fixed schedule. The child terminates the nursing. Later on the child will eat and sleep when and where he chooses. Toilet training is not undertaken until the child can talk and then is gradual and gentle. Weaning is delayed until the child is at least eighteen months old, and usually two years old or more. All Navahos make a considerable fuss over babies, fondling them and playing with them a great deal. The investigators report that Navaho children develop "a secure and confident personality."

Still another variation in the pattern of child care and in the resulting personality pattern is reported for Bali.[16] Photographs have familiarized us with the remarkable grace of the Balinese as expressed in their trance-like dances. With blank expressions

[12] A. Kardiner, *The Individual and His Society*, with a foreword and two ethnological reports by R. Linton (New York: Columbia University Press, 1939).

[13] Cora DuBois, *The People of Alor* (Minneapolis: The University of Minnesota Press, 1944).

[14] J. W. M. Whiting and I. L. Child, *Child-Training and Personality* (New Haven, Conn.: Yale University Press, 1953).

[15] Dorothea Leighton and Clyde Kluckhohn, *Children of the People* (Cambridge, Mass.: Harvard University Press, 1947). This is part of a program to investigate the development of personality in a sample of about a thousand children, six to eighteen years old, in each of five tribes: Hopi, Navaho, Papago, Sioux, and Zuni. Published studies are: Laura Thompson and Alice Joseph, *The Hopi Way*, 1944; and Gordon Macgregor, *Warriors Without Weapons*, 1946, both published by The University of Chicago Press.

[16] G. Bateson and M. Mead, *Balinese Character: A Photographic Analysis* (New York: New York Academy of Sciences, 1942).

on their faces, they hold a posture for a long time; and when changing it, they do so with a "waxy flexibility." Why do the Bali behave like this? We are told that they receive affection and attention as young infants, but before the year has passed, a sudden change in parental attitude occurs. Now when the child bids for attention, his mother turns away from him and teases him by fondling some other child; if she doesn't have one of her own, she will borrow a child for the purpose. This rebuff usually produces a temper tantrum in her own child, which she smilingly ignores. Also as the child wanders from his mother's side, she calls out a word signifying danger and he scurries back. He learns that it is unprofitable to give himself either to others or to the outside world. Instead he withdraws into himself, develops a narcissistic interest in his own body, and becomes adept at posturing.

The conclusions presented above regarding the bearing of early childhood training practices on personality are either those of psychiatrists, based on case studies of abnormal subjects, or those of anthropologists based on observations and inferences. In neither case are representative samples or careful measurements used. Sewell [17] has sought to satisfy both of these criteria in a study of 162 farm children of old American stock, five to six years old. Carefully trained interviewers questioned the mothers regarding the infant training practices they had used, and the personality of the children was measured by several objective tests. None of the disciplines used by the mothers was significantly related to personality adjustment as determined by personality tests and personal interviews, and some of the relations were in the opposite direction from that suggested by psychoanalytic theory. Despite the care used, Sewell points out the limitations of his study in the crude controls and imperfect measuring devices employed. The significant factors in personality development may not be the child-rearing practices but the total personal-social situation in which they occur, including the attitudes of the mother, which are extremely difficult to isolate and measure.

A significant point emerging from the preceding paragraphs is that cultures differ in the degree of strain they produce in man. Some cultures make for greater happiness than others; some lead to a better adjustment, others to a worse adjustment, from the standpoint of biological man. If the human infant needs affection and care for his complete maturation, then a culture like the Marquesan which frustrates these needs will cause more strain than one which fulfills them, like the Hopi. Of course the human being has many needs other than the one just cited, some biological, others social, so that the problem of the adjustment of man and culture is an exceedingly complex one. How the culture satisfies or fails to satisfy human needs is an enormously important question which is considered further in the next chapter.

DIFFERENCES IN PERSONALITY WITHIN A SOCIETY

The general terms in which the foregoing discussion is couched may give the impression that all members of a society have identical personalities, which is obviously not the case. All Pueblo Indians are not equally calm nor all Plains Indians equally violent. Indeed some Plains Indians may be more restrained in particular situations than some Pueblos. How do these individual differences arise? The cultural factor alone accounts for differences in personality when the comparison is between different societies, but how shall we account for variations

[17] William H. Sewell, "Infant Training and the Personality of the Child," *American Journal of Sociology*, 58: 150–159, September 1952.

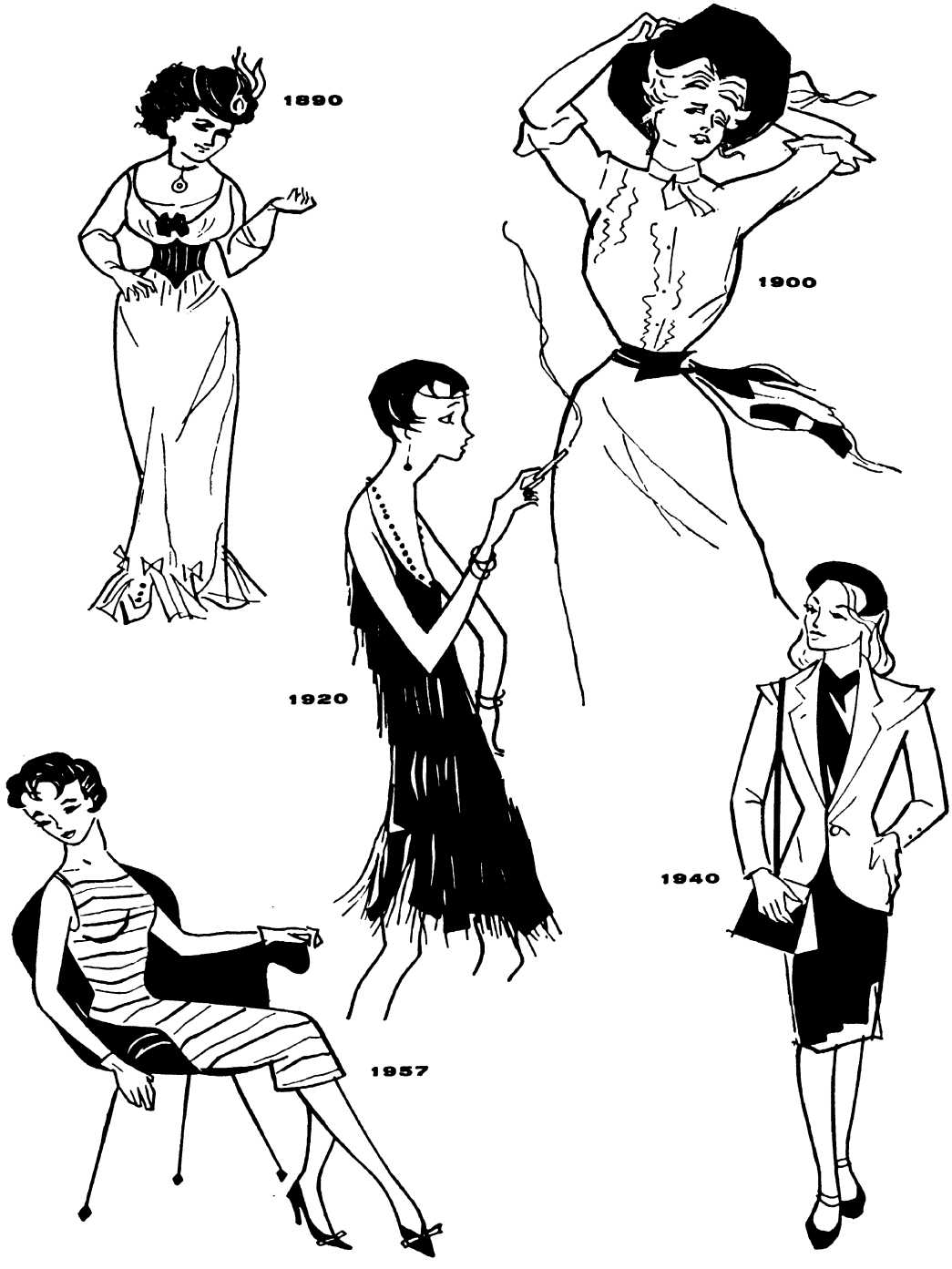
in personality traits within a given society? The answer lies in part in differences in (1) constitutional characteristics, and in (2) emotional relationships with members of the family and other groups.

The group and culture select constitutional traits for special valuation. Although the analysis of constitutional variations as determinants of personality variations is not a proper function of sociology, we may note, in passing, the direct influence of the constitutional factors as shown in differences in intelligence and temperament. But there are indirect ways in which the physical structure may contribute to personality which are the concern of the sociologist, namely via the valuation of physiological traits by the group and culture.

If we assume that any constitutional trait which is highly exceptional will cause the individual who has the trait to stand out from the group and thus become a marked person, the differential response of the group to the exceptional trait would appear to be a factor making for variation in personality. We cannot say what the effect on personality will be unless we know the evaluation that the group makes of the trait. An individual with red hair will tend to have a somewhat different personality from a person with brown or blonde hair because red hair is rare and vivid; but we cannot say for certain how his having red hair will affect his personality, since his playmates may tease him about it or envy him for it.

While little direct connection has been established between specific constitutional and personality factors, the situation is different for the indirect influence of physique. Ziegfeld, originator of the famous "Follies," used to say that the most beautiful girls in his chorus were the poorest dancers. They had no great urge to practice long hours at dancing, since their beauty alone brought them a great deal of attention. Beauty may, of course, depend somewhat on factors other than the genes, such as proper diet, good health, and the skill of one's hairdresser and cosmetologist; but it is essentially built out of hereditary traits. The hereditary traits, however, are only indirectly responsible for such personality traits as self-assurance and poise that flow from beauty. It is the group or culture that admires the physical traits and gives them prestige value. Societies vary greatly in the constitutional traits that are deemed attractive. Some primitive peoples value obesity in women very highly. In some places the belle of the community is a woman so heavy she cannot support her own weight. In our society, at present, a slim figure is thought to be attractive; but this was not always so, as the paintings in art galleries indicate. The influence of physique on personality is, then, largely indirect, operating through the valuation placed by the group on constitutional traits.

Cultural variations within a society are also determinants of personality differences. Constitutional and group variations do not exhaust the determinants of personality differences within a society. Cultural variations must be considered, too. Culture varies within a society and not just between societies. It is a point of the first importance to recognize that culture is not a single massive die that cuts all the members of the group to precisely the same specifications. Culture exerts uniform influences only through the so-called "universals," the aspects of culture to which all the members of the group are subject. In a homogeneous culture, the universals might include language, certain elements of technology, the incest taboo, and ridicule for wrong-doing — to mention but a few items. Even these items are not universal in the sense of affecting identically all the members of the group; some individuals, perhaps because of royal rank, may be exempted from the traditional taboos against incest; and special groups in a culture, like the medicine men, may have



104 The Changing Concept of the Beautiful Woman in America

Women who are more beautiful tend to have more self-confidence and poise than women who are less beautiful, because of the special valuation of certain constitutional traits by society. The physical structure contributes to personality indirectly through the cultural norms, but both the physical structure and the cultural norms may vary. The concept of the beautiful woman has changed in the course of time in American society, as the above sketches show.

their own vocabulary and forms of speech. A certain body of language, religion, etc., may be common to all the members of a society. This common culture may produce consensus or common understandings, thus integrating the group. But the point to be noted here is that even in simple cultures the social heritage, far from being uniform for all members, consists of a series of subcultures applicable to special groups. In addition to the universals, there are what Linton calls "specialties" and "alternatives." [18] The latter are the choices open to a member of society from among a variety of approved ways of behaving; in recreation, for example, there are a number of activities which one may choose. If, for instance, the choice is chess, the consequences for personality will be different from what they would be if the choice were baseball or football.

Differences in learning bring differences in personality. In the United States today, men are more athletic, more interested in mechanical manipulation, more aggressive than women. A test has been devised to measure the masculinity and femininity components.[19] This is not a test of innate biological differences but of learned differences between the sexes in a particular cultural setting. The discussion of an earlier paragraph showed that women's personalities have changed as woman's culture has changed. Mead has shown that the personality of women varies greatly in different cultures, from extreme submissiveness to extensive dominance.[20]

Class differences in personality. The alert reader has doubtless observed, as he has followed the discussion, that sex and age do not exhaust the bases for differences in learning. Occupation, education, and income are also selective factors. The relation of these factors to social class status is considered in detail in Chapter 7 but here we should find it useful to consider the recent findings of research on the relation of class differences and personality in the United States. These findings show the folly of treating "The American Character" as if it were an undifferentiated whole, without regard to the differences in learning and personality that separate the Huckleberry Finns from the Little Lord Fauntleroys and both from boys of intermediate classes.

Compared with middle- and upper-class infants, lower-class infants are more often breast fed, and for longer periods of time. Cleanliness training is begun later. They have less supervision and more freedom. They are generally not required to assume responsibility of self or home at as early an age.[21] Emotional expression is relatively more direct. Sex finds an earlier and more frequent outlet in heterosexual activity, whereas with the middle classes the taboo against direct sex expression more often leads to autoerotic practices and petting.[22] Deprivation among the poor having to do more often with food and creature comforts, daydreams tend to focus on these objects, whereas for the same reason the daydreams of the middle-class youth have a larger sex component. Aggression in the lower classes is more likely to take the form of fighting, whereas middle-class boys are more often taught that the open expression of anger is

[18] Ralph Linton, *The Study of Man* (New York: Appleton-Century-Crofts, Inc., 1936), pp. 272–274, 278–279.

[19] L. M. Terman and C. C. Miles, *Sex and Personality* (New York: McGraw-Hill Book Company, Inc., 1937).

[20] Margaret Mead, *Sex and Temperament in Three Primitive Societies* (New York: William Morrow & Company, 1935); *Male and Female* (1949).

[21] Martha C. Ericson, "Child-Rearing and Social Status," *American Journal of Sociology*, 52: 190–192, November 1946.

[22] Alfred C. Kinsey *et al.*, *Sexual Behavior in the Human Male* (Philadelphia: W. B. Saunders Company, 1948), Chapter 10.



105 Glands and Personality

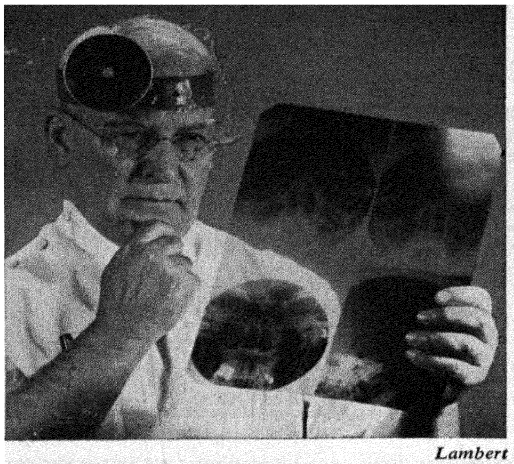
Highly selected breeds of dogs differ in temperament as, for instance, the bulldog and the Saint Bernard. The differences are due, in part, to the endocrine glands. Varying degrees of balance in the endocrine system of human beings contribute to differences in temperament and behavior, but not as compulsively as in dogs because of the greater role of the learning process in human experience. In the above pictures the first pair are achondroplastic and the second pair, acromegalic, both associated with opposite variations in the pituitary. The third pair are hyperthyroid. All are extreme deviations. (From C. R. Stockard, *Physical Basis of Personality*, New York, W. W. Norton and Company, 1931.)

not proper. The poor are reported to be more conventional in religious beliefs,[23] and more radical in their politico-economic thinking.[24] As might be expected, the lower-class children have less social poise.[25] As a result of the more permissive rearing, lower-class children are said to be more relaxed while the middle-class children develop anxiety because of the social pressure to which they are subjected. It is claimed that the neurosis of middle-class children is mainly the result of the strong accent on

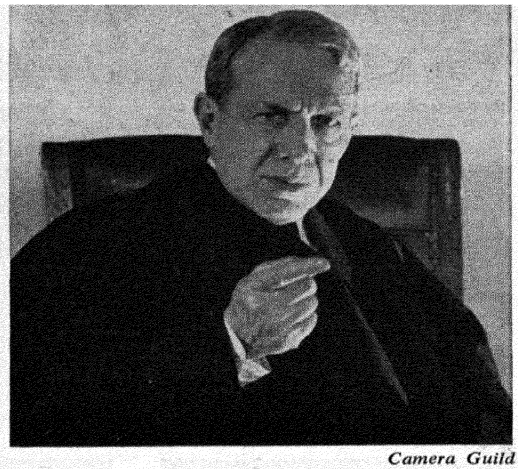
[23] Harrison G. Gough, "A New Dimension of Status: I. Development of a Personality Scale," *American Sociological Review*, 13: 401–409, August 1948.

[24] Richard Centers, "The American Class Structure: A Psychological Analysis," in T. M. Newcomb and E. L. Hartley (eds.), *Readings in Social Psychology* (New York: Henry Holt & Co., Inc., 1947).

[25] A. Gesell and E. E. Lord, "Psychological Comparison of Nursery School Children from Homes of Low and High Economic Status," *Journal of Genetic Psychology*, 34: 339–356, September 1927.



Lambert



Camera Guild

106 Occupations and Personality

The different occupations we follow lead to different sets of habits. Are they effective in producing different types of personalities? (For another theory of personality see the preceding figure.)



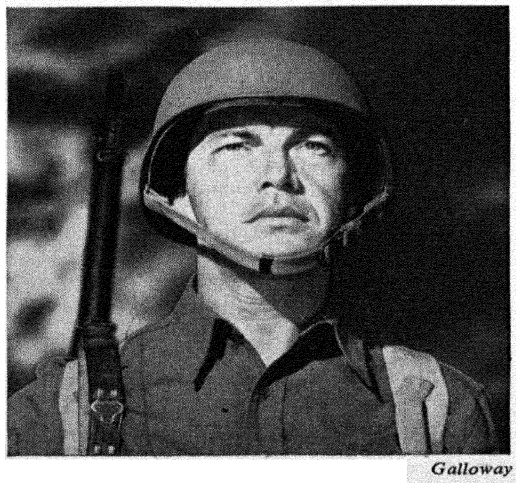
Galloway



Keystone View Company



Lambert



Galloway

status [26]; yet one investigation [27] suggests that children from families of semi-skilled workers have more worries and less emotional stability than children from professional families. This finding squares with the known inverse relation between insanity rates and amount of family income,[28] although poverty may be a result as well as a cause of mental illness. The figures on mental disorders indicate that the rearing of children among the poor, despite its permissive character, is not free of tension. Economic insecurity and affectional insecurity may be offsetting factors.

Ethnic prejudice is correlated negatively with social class. Two significant findings of research are that (1) individuals high in ethnic prejudice differ in personality from those low in prejudice [29] and (2) there is apparently a considerable negative correlation between social class (education) and degree of ethnic prejudice.[30] These findings are based on scores on attitude scales which embody elements of anti-democratic tendencies of a fascistic sort. These tendencies, expressed in such beliefs as that "what youth needs most is strict discipline" and "what the country needs most is a few courageous leaders," are characteristic of what is called "the authoritarian personality." It is reported that individuals who show prejudice in one form toward a specific minority also tend to show other forms of prejudice. Also, prejudice against one out-group is usually accompanied by prejudice against other groups. In general, persons high in ethnic prejudice are differentiated significantly from persons low in ethnic prejudice by relatively low levels of mental functioning and by hostile and fearful attitudes toward others and self.

Occupation may affect personality directly. An individual's occupation affects his income and family reputation, and is a factor in the determination of his social status which in turn affects his personality. The role of occupation in personality development in this case is indirect. The influence of occupation may, however, be direct and apart from social-class position. Consider two individuals of the same social class but of different occupations, say a clergyman and an artist. We expect a clergyman in the United States today to be emotionally stable, altruistic, conservative in his family life, and conventional in dress and manners, but we are less critical of a temperamental, self-centered, immoral, unconventional artist, especially if he is eminent. The roles of the minister and the artist are differently defined by society. Likewise firemen, policemen, and soldiers are expected to show more physical courage than those not in the protective services. Among most primitive peoples, since specialization is generally not carried very far, occupations play a minor part in determining cultural roles; but with the growth of technology and division of labor, occupations become increasingly important for this purpose. Sociologists have shown some interest in analyzing occupations as social roles but so far have not been much concerned with tracing out the consequences for personality.

A further basis for the differential ascription of culture to individuals in a society is membership in associations. Even in primi-

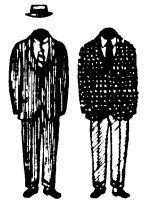
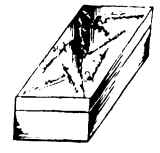
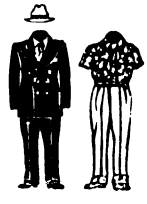
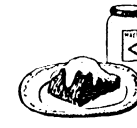
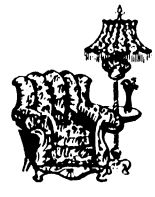
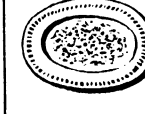
[26] Arnold Green, "The Middle Class Male Child and Neurosis," *American Sociological Review*, 11: 31–41, 1946.

[27] Nancy R. Maddy, "Comparison of Children's Personality Traits, Attitudes, and Intelligence with Parental Occupation," *Genetic Psychology Monographs*, 27: 3–65, 1943.

[28] R. E. L. Faris and H. W. Dunham, *Mental Disorders in Urban Areas* (Chicago: The University of Chicago Press, 1939).

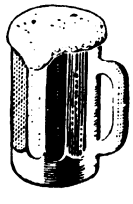
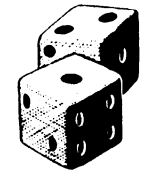
[29] T. W. Adorno *et al.*, *The Authoritarian Personality* (New York: Harper & Brothers, 1950).

[30] Richard Christie and Marie Jahoda (eds.), *Studies in the Scope and Method of "The Authoritarian Personality"* (Glencoe, Ill.: The Free Press, 1954).

	CLOTHES	FURNITURE	USEFUL OBJECTS	ENTERTAINMENT	SALADS
HIGH-BROW 	 TOWN: Fuzzy Harris tweed suit, no hat. COUNTRY: Fuzzy Harris tweed suit, no hat	 Eames chair, Kurt Versen lamp	 Decanter and ash tray from chemical supply company	 Ballet	 Greens, olive oil, wine vinegar, ground salt, ground pepper, garlic, unwashed salad bowl
UPPER MIDDLE-BROW 	 TOWN: Brooks suit, regimental tie, felt hat. COUNTRY: Quiet tweed jacket, knitted tie	 Empire chair, converted sculpture lamp	 Silver cigaret box with wedding ushers' signatures	 Theater	 Same as high-brow but with tomatoes, avocado, Roquefort cheese added
LOWER MIDDLE-BROW 	 TOWN: Splashy necktie, double-breasted suit. COUNTRY: Sport shirt, colored slacks	 Grand Rapids Chippendale chair, bridge lamp	 His and Hers towels	 Musical extravaganza films	 Quartered iceberg lettuce and store dressing
LOW-BROW 	 TOWN: Loafer jacket, woven shoes. COUNTRY: Old Army clothes	 Mail order overstuffed chair, fringed lamp	 Balsam-stuffed pillow	 Western movies	 Coleslaw

107 Life Among the Highbrows, Lowbrows, and Middlebrows

Even though 100,000,000 of us go to the moving pictures each week and many millions drink Coca Cola and read the same comic strips, we are not entirely alike. Our differences are shown in manners and customs, often associated with our occupations, each with its distinctive folkways and its special vocabulary. Our differences are also exhibited, usually with pride if not snobbery, in our tastes, by which we set standards and

DRINKS	READING	SCULPTURE	RECORDS	GAMES	CAUSES
 A glass of "adequate little" red wine	 "Little magazines," criticism of criticism, avant garde literature	 Calder	 Bach and before, Ives and after	 Go	 Art
 A very dry Martini with lemon peel	 Solid nonfiction, the better novels, quality magazines	 Maillol	 Symphonies, concertos, operas	 The Game	 Planned parenthood
 Bourbon and ginger ale	 Book club selections mass circulation magazines	 Front yard sculpture	 Light opera, popular favorites	 Bridge	 P. T. A.
 Beer	 Pulps, comic books	 Parlor sculpture	 Jukebox	 Craps	 The Lodge

maintain distinctions. In the language of the lowbrow, "birds of a feather flock together" (the highbrow would be more likely to refer to "consciousness of kind"), despite the leveling effect of mass production and democracy. The sketches, which are not based on research, are from *Life*, 29:100–101, April 1949. They were suggested by an article by Russell Lynes, "Highbrow, Lowbrow, Middlebrow," *Harper's Magazine*, February 1949, and are reprinted here with the permission of Russell Lynes and of *Life*, © Time, Inc., 1949.

tive communities we find individuals organized into exclusive clubs or associations, often secret in nature, so that the culture they transmit is reserved for members only. In our own society, such special-purpose associations are exceedingly numerous, each with its own body of culture. What an individual learns if he is a member of Phi Beta Kappa is different from what he learns as a member of the Ku Klux Klan, or the Longshoreman's Union, or the Masons, or the Young Men's Christian Association, or the Bach Chorale Group, or the West Side Bridge Club, or the Browning Society, or the Salvation Army, or the Chamber of Commerce, or the Single Taxers, or the American Legion, or the Communist Party, or the Oxford Movement. The influence of such associations on personality may be to reinforce existing habits rather than to establish new ones, because individuals with particular traits may be attracted to one type of association rather than another. Much depends on how old the individual is when he affiliates.

The existence of numerous special purpose associations in our society today suggests that ours is not a single homogeneous culture like that of primitive peoples but rather a congeries of special subcultures superimposed upon a common cultural base. While the existence of the functional unit, the United States of America, implies a body of common understandings, or a consensus, still we cannot ignore the vast regional and ethnic differences in culture which also exist. It is one thing for a child to be reared among the "Pennsylvania Dutch," another for him to be educated among the California Molokans, still another for him to grow up in a Mormon community. A close student[31] of regional cultures in the United States suggests that, among other values, thrift is given special emphasis in the rural Northeast, Protestant morality in the Southeast, democratic symbols in the Middle States, "taking a chance" in the Southwest, and optimism in the Far West.

[31] John Gillin, *op. cit.*

Cultural Change and Personality

It is often stated with an air of finality, that human nature cannot be changed; that, for instance, we can never hope to abolish war because man is by nature pugnacious. The argument of this chapter, on the contrary, has been that human nature is highly changeable, that human personality is mainly the product of culture rather than culture the product of human personality. We do not have war because man is bellicose by nature; we might have war even if man were pacifistic by nature. At least many persons fight in modern wars who have little enthusiasm for combat; they have to be drafted. Also war does not occur in some cultures, although there may be fighting and occasionally even murder. If by human nature is meant man's biological nature, then it may be true that human nature cannot be changed; at least, it probably has not changed in any significant respects in the last 10,000 years or longer. Man's biological nature could perhaps be changed by selective breeding, like that used for plants and lower animals, but so far man has shown a strong disinclination to apply these positive eugenic practices to himself.[32] Man's biological nature includes the capacity to generate and express fear and hate, and it is doubtful that culture can completely stifle these emotions. But the discussion of preceding paragraphs has shown that culture can and does determine the direction and degree of emotional expression. There is an enormous difference between the Borneo headhunter and the Quaker who fights for peace; yet a Borneo child reared by Quakers

[32] For further treatment of this question, see Chapter 4.

would be peace-loving, while the offspring of Quaker parents brought up in Borneo would hunt heads. The range of human traits is wide, from the utter filthiness of some primitive and peasant groups to the aseptic cleanliness of modern surgeons; from the self-torture of Plains Indians to the flight-from-pain via analgesics of modern man; from the religious devotion of the yogi to the atheism of the commissar. So variable indeed is the influence of culture that in some instances it almost succeeds in turning human nature inside out, as Faris suggests in the following:

> Ethnological studies have no more important lesson to teach the sociologist than the lesson of the almost limitless adaptability of the human animal. Given an uncontradicted cultural medium and we can see that the powerful drives of hunger, sex and even the will to live are as nothing if they run counter to the mores. Confirmation of this is familiar to us all. Voluntary fasting, voluntary celibacy, voluntary mutilation and torture, voluntary suicide — examples abound to show the irresistibility of the cultural model. One can no more organize his personality independently than he can be born without a mother.[33]

Within broad limits, man's biological nature is highly plastic. Though biological nature has this very great plasticity, it does not follow that any degree of modification of cultural behavior yields the same degree of adjustment to biological nature. We may train ourselves to get along with four hours of sleep or with ten hours. Man's nature is thus plastic. But it is quite possible if the modification is stopped at some point around eight hours, instead of four hours, that a better adjustment between biological nature and environment is secured. To point out the plastic nature of habits leaves somewhat unanswered the question of what is the best habit. Thus the adjustment of culture and the human constitution raises the question of the degree of adjustment as well as the limits of plasticity. This question is discussed further in Chapter 26.

Our discussion has shown that if we are to change widely established personality traits, we must first change the culture. Although changing the culture is not easy, it is possible within limits, and is easier than trying to change man's genes. One thing we cannot do is wipe clean the cultural slate. We cannot start all over again to build man anew, but must face up to the existing culture. The effort to make the Germans and the Japanese quickly democratic according to the American model is doomed to failure, for it does not reckon with a long-standing tradition of these people, which is favorable to authoritarian rule. The adoption of the Weimar Constitution in Germany after the First World War was an attempt to make Germans as democratic as New Englanders, but it failed because of a thousand years of hostile tradition. In Japan after World War II the same mistake was not repeated; at least the Emperor, the principal symbol of authority, was retained. Reforms calculated to produce new personality traits have more chance of success if they are adapted to existing conditions.

Indeed, if the change is drastic, and sudden besides, the result may be not the adoption of new traits or even the retention of the old but the disorganization of personality itself. History furnishes numerous examples of the disastrous effects of such acculturation. Macgregor's study[34] of the Pine Ridge Sioux shows the most distinctive personality traits of the children to be insecurity and anxiety. The typical child lacks spontaneity, imagination, and strong drives probably because of his early repressive training, the result of reorganization and

[33] Ellsworth Faris, *The Nature of Human Nature* (New York: McGraw-Hill Book Company, Inc., 1937), p. 279.

[34] Gordon Macgregor, *op. cit.*

breakdown of culture under reservation conditions. Here we have the sudden, more or less complete superimposition of one culture upon an alien one. Rapid cultural change within a given society may have similar if less drastic effects. How cultural change influences personality adversely is discussed at greater length in the next chapter.

SUMMARY

Confronting the child at birth is a ready-made culture to which he must largely submit. Since each child is dynamic and unique, his relationship to culture is not entirely one-sided like that of the potter and the clay. Nevertheless the culture is dominant. John Dewey has symbolized the situation by observing that the scope of culture's contribution to the individual bears the same relation to the individual's influence on culture as his total vocabulary bears to the words which he himself originates.

How culture influences personality has only recently been investigated and our knowledge is sketchy. There is first the influence of individual culture traits. It has been shown, for example, that differences in punctuality between two groups of people are related to differences in the diffusion of timepieces. Other culture traits, non-material as well as material, contribute to personality differences. But cultures are complex wholes, and we are therefore mainly interested in inquiring how the major emphases of a culture affect personality. Different cultures often produce different personality norms. We see in one culture an accent on competition, in another an accent on cooperation. The range of variation in personality traits may be much the same in different societies, but the frequencies differ. Personality traits, moreover, differ in their adaptive value, hence the number of well adjusted and poorly adjusted persons varies from society to society. Most Zunis are said to feel emotionally secure, and most Alorese insecure.

How account for the variation in personality within a culture? Individual differences in biological constitution and interpersonal relations are factors, but individuals differ also in cultural experiences. There is in every culture what may be called a division of learning according to social classification. Both sexes and all age groups learn certain things in common but in addition each sex and age group learns different things. Age-grading and sex-typing are perhaps the most important classifications for determining social roles. Occupation, education, income, and family background are additional selective factors which are highly important in determining what aspects of the culture an individual will be exposed to. All cultures accordingly produce variety as well as uniformity of personality, and this is particularly true for a culture like that of the United States, which is not whole cloth but a patchwork of many different pieces.

It is well to note that the same personality trait can often be produced by varying any one of the four components. The trait of dominance or leadership may be influenced by inherited and constitutional causes affecting the glands. Some children observed in the nursery school are aggressive at a very tender age before the environment has had a chance to influence them much in this way. But a child who is not dominant naturally may be made more aggressive by increasing the domination at home or the ridicule by the gang; that is, by varying interpersonal, or group, factors. Again, a child who is normally not very assertive may perhaps be rendered more energetic by environmental pressures, such as the frequent prospect of famine or constant danger from

attack by wild animals, as may be the case in primitive society.[35] Finally, training or cultural experience may convert a submissive child into an assertive one.[36]

[35] In the main, however, the geographic factor can be shown to be of negligible significance for personality, and not of equal importance with the other three factors.

[36] Lois M. Jack, "An Experimental Study of Ascendant Behavior in Pre-School Children," *University of Iowa Studies in Child Welfare*, 9: 7–65, 1934.

QUESTIONS FOR DISCUSSION

1. When off duty, are railroad engineers more punctual than other people in keeping appointments?
2. How have the personality traits of women in America changed with changes in culture?
3. "John Dewey has said in all seriousness that the part played by custom in shaping the behavior of the individual as over against any way in which he can affect the traditional custom, is as the proportion of the total vocabulary of his mother tongue over against those words of his own baby talk that are taken up into the vernacular of his family." (Ruth Benedict, "The Science of Custom," in V. F. Calverton [ed.], *The Making of Man*, New York, The Modern Library, 1931, p. 807.) Discuss.
4. "The ethical philosophy of Confucius written two centuries before Plato has been the constantly accessible textbook, and its concepts have been absorbed even by the illiterate. One cannot find Chinese who are not polite according to the Confucian code." (H. A. Miller, "Social Process in Asia," in *Social Problems and Social Processes*, p. 16.) Discuss.
5. What does a person's speech reveal about his personality?
6. How may the personality trait of exactness in the scientist be partly a function of the language of his culture? What other cultural traits are involved?
7. What is meant by "basic personality structure"? How is it related to (a) culture? (b) social adjustment?
8. How account for variations of personality within a single culture?
9. Why does there tend to be greater differentiation of personality in modern culture than in primitive?
10. How do the factors of heredity, group, and culture interact in the formation of personality? Are certain traits always brought about by the same types of causes?
11. Do animals have personalities? Defend your position.

TOPICS FOR REPORTS

1. Physical courage of the Blackfoot Indians.
2. Personality differences of lawyers and doctors in our culture.
3. Some beneficial effects of intense personal competition in our culture.
4. The personality traits of Manus children. Margaret Mead, *Growing Up in New Guinea*. New York: Morrow, 1930.)
5. Culture and personality of the Chinese.
6. Culture and personality of Quakers.

SELECTED READINGS

BENEDICT, RUTH, *Patterns of Culture.* Boston: Houghton Mifflin Company, 1934.

How some more or less intangible elements of culture ramify widely through society is shown excellently for certain American Indian peoples.

JUDD, CHARLES H., *The Psychology of Social Institutions.* New York: The Macmillan Company, 1926.

This valuable book shows how habits — that is, phases of personality — vary according to the adjustments made at different times to social institutions and to material objects of culture.

KARDINER, ABRAM, *et al., The Individual and His Society.* New York: Columbia University Press, 1939. *The Psychological Frontiers of Society.* New York: Columbia University Press, 1945.

These outstanding books develop a technique for interpreting personality in terms of culture, with applications to two primitive societies and a rural community in the Middle West.

KLUCKHOHN, CLYDE, and HENRY A. MURRAY with the collaboration of DAVID M. SCHNEIDER (eds.), *Personality in Nature, Society, and Culture,* second edition, revised and enlarged. New York: Alfred A. Knopf, Inc., 1954.

Forty-four essays by a variety of specialists, together with introductory notes and two chapters by the editors.

LINTON, RALPH, *The Cultural Background of Personality.* New York: Appleton-Century-Crofts, Inc., 1945.

Five essays which attempt to bring together anthropology and psychology in the study of personality by providing a common terminology and frame of reference.

MEAD, MARGARET, *Coming of Age in Samoa.* New York: William Morrow & Company, 1928. *Growing up in New Guinea.* New York: William Morrow & Company, 1930.

Not many books exist on the education of the children of preliterate races and fewer are informative about how the educational process leads to personalities in cultures radically different from ours. For this reason these two books are valuable.

MEAD, MARGARET, and MARTHA WOLFENSTEIN (eds.), *Childhood in Contemporary Cultures.* Chicago: The University of Chicago Press, 1955.

A series of studies of aspects of childhood in several cultures, emphasizing patterns and based on qualitative analyses.

12

Socialization and Social Deviation

To look upon the bright, smiling faces of high school seniors at commencement time in such a great commonwealth as New York State, one would never guess that one in twelve of the graduating class, who look upon life with such promise, will at some future time be found in a hospital for the insane. This is a shocking thought. The average age of those who read this book is perhaps around twenty. In New York State, where there are excellent statistics of mental disorders and extensive hospital facilities, the probability that a young man of twenty will be in a hospital for mental disorders sometime during his life is 83 out of 1000; and of a young woman, 84.[1] This rate is about the same as that quoted above for those of high school graduating age.

In these same graduating classes of high school seniors, there are also boys and girls who will at some future time be convicted of a crime and be sent to prison. A life-table giving the probabilities of commitment to a prison for crime, comparable to the life-table for commitments for psychoses, has not been prepared. We know, however, that the incidence of commitments for crime is very great.

The insane and the criminal are at once identified as the two principal types of social deviants. There are other types, such as the mentally defective. Three out of every 100 children born in the United States are mentally retarded to the extent that they benefit little or not at all from regular schooling.[2] This is not the place, however, for an inventory or description of socially abnormal types, since this chapter is concerned rather with an analysis of social deviation in general and especially the social factors that underlie deviation. In the interests of coherence of presentation, the illustrations will be taken from the field of mental disorders; crime and other deviant behavior will be referred to only when it does not fit the general principles that are developed.

Social deviation is nonconformity to the norms of the group. The insane and the criminal are social deviants because they do not conform to the norms of the group. The group expects its members to engage in interaction which is responsible and predictable, and this the insane cannot do. The group also expects its members to conform to certain ethical and legal practices, and the criminals are those who violate these practices. Normal individuals also transgress from time to time and may behave in irrational ways on particular occasions. Society distinguishes between those whose deviation is temporary and those whose deviation is of longer duration. The temporal point is therefore important in the conception of social deviants, who represent various social types, that is, more or less persistent constellations of personality traits. A

[1] *Trends of Mental Disease* (New York: Kings Crown Press, 1945), p. 52.

[2] *The Child Who Is Mentally Retarded* (Children's Bureau Folder No. 43, 1956).



Courtesy Saint Elizabeth's Hospital

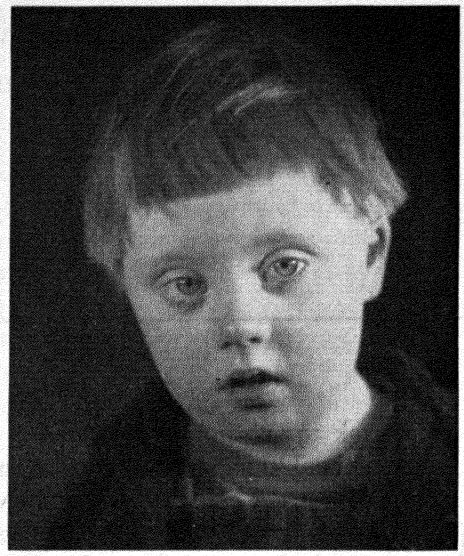
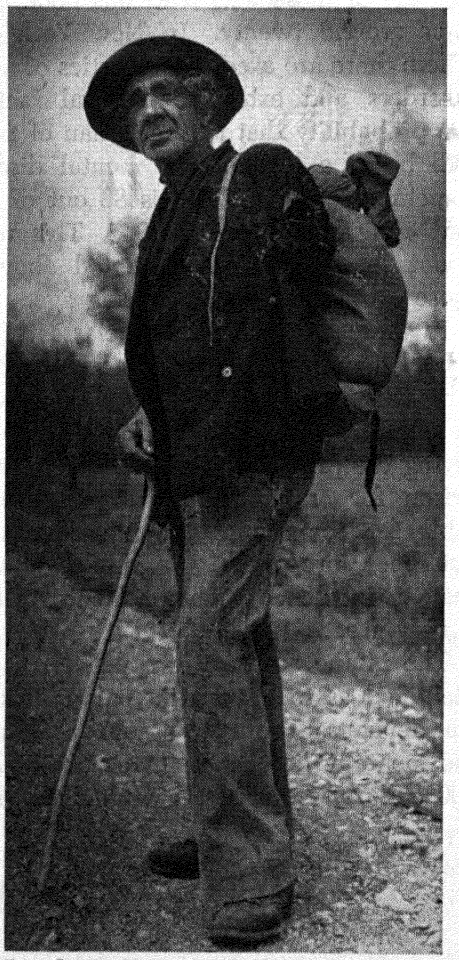


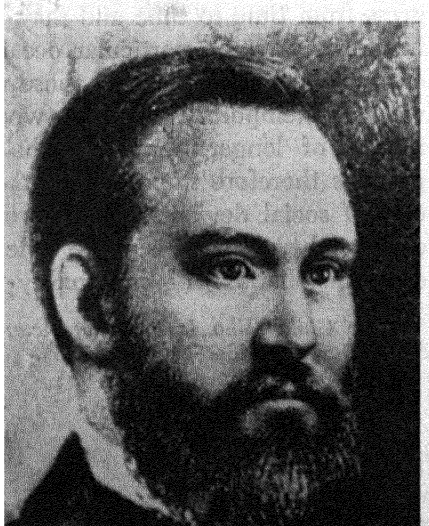
Photo from Dr. Clemens Benda, in L. Carmichael (ed.), Manual of Child Psychology, *2d. ed., John Wiley & Sons, New York.*

108 Deviant Social Types

The schizophrenic is withdrawn and does not maintain rapport and communication with others. The child afflicted with Mongolism generally has insufficient intelligence to be able to learn how to adjust adequately in society, but it is society's reaction to his defect as well as his lack of adjustment that makes him a deviant social type. Mongolism is a prenatal, developmental disorder; certain characteristic physical traits of the Mongoloid make him stand out from other people making it "easy" for society to define him as a deviant. The criminal, represented by Jesse James, characteristically violates ethical norms established by law but is not necessarily emotionally or constitutionally deficient. The hobo does not measure up to the group norm of social responsibility, though his behavior may be within the law.



Free Lance Photographers Guild, Dale Vincent



Wide World Photos

criminal under the law is one who is found guilty of one or more crimes, and a person who commits only one crime in his lifetime and is adjudged guilty is a criminal under the law. But when we speak of a criminal type, we usually have in mind someone for whom criminal behavior is characteristic.

Different groups within a society may have different norms. Different groups have different ideas of permissible behavior. The range of acts that would be approved by college students differs from that which would be approved by college authorities. In somewhat comparable manner, certain groups of delinquents share values that help to explain their delinquency. Middle-class and working-class children tend to grow up in different social worlds; but in the schools and elsewhere, the working-class children are judged by middle-class standards, which many are ill equipped to meet. These frustrated children flock together in little gangs, where a subculture emphasizing malice and negativism is developed and in which delinquent behavior is rewarded because it represents an attack on the values of the respectable middle class. These delinquents behave in accordance with the norms of a delinquent subculture.[3] When speaking of norms, therefore, it is helpful to indicate whose norms are being referred to, especially in a modern society which is complex and rapidly changing. In this discussion the reference will be to the norms of the inclusive society, unless otherwise indicated.

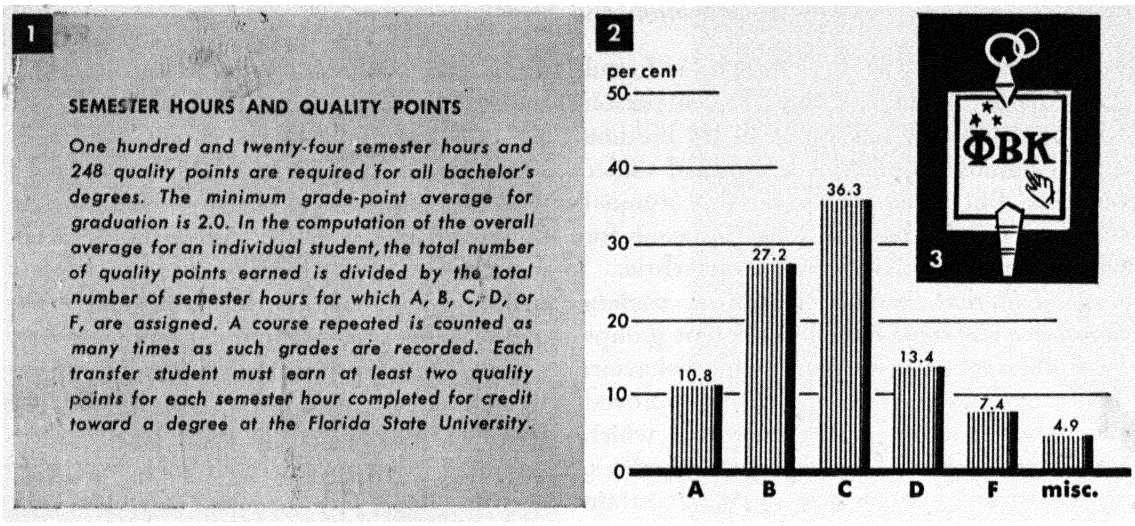
The cultural norm is the "standard desired." A further clarification of terms is needed. The term cultural norm, as used in this book, refers to the "standard desired" and not to the cultural norm in the statistical sense, which is the way most people in the society behave. The latter is more properly referred to as the mode. The cultural norm and the mode are often the same, though, as in manners and etiquette.

Social deviants represent failure in socialization. Socialization is the process by which the individual learns to conform to the norms of the group. When he does not more or less systematically conform, he is a social deviant. This is the most general use of the term socialization; but some writers use the term in a more restricted sense, as the tendency to like to be with others. The socialized person, in this sense, is the extrovert, the good mixer. This meaning probably has more relevance for a culture like that of the United States, which emphasizes sociability, than it does for a culture like that of India, which gives more weight to mysticism and the inner life.

In Chapter 9 there was discussion of methods used by the group to bring deviants back into line and to punish them for their deviation. These efforts by the group were labeled *social control,* which is concerned, as it were, with the failures in socialization. The present chapter approaches the same problem from the standpoint of the individual, as a function of the development of personality. Our interest here is in the process of socialization and the reasons why it sometimes goes awry.

The process of socialization is one of alternating differentiation and integration. The social order is maintained largely by socialization, not social control. That is to say, most members of a society can be counted on to behave in ways which are in consonance with the values of the group. This result is achieved by a process of assimilation of newcomers. Some of the newcomers are immigrants from other societies or subcultures of the same society, but generally most of the newcomers are new-born babies. We have seen that the new-born infant has needs like those for food and warmth that press for satisfaction. Normally it is his mother who mainly satisfies

[3] Albert K. Cohen, *Delinquent Boys: The Culture of the Gang* (Glencoe, Illinois: The Free Press, 1955).



109 Three Types of Norm

Social norms are of three types: (1) group standards of acceptable behavior, deviation from which, if noted, leads to social censure; (2) the actual behavior of most members of a group in a given situation, referred to as the statistical mode; and (3) group ideals, setting standards of perfection or excellence. In some situations, the desired cultural standard (1) and the mode (2) coincide. Shown above are a portion of a college catalogue setting forth some conditions for graduation; a curve of the distribution of a semester's grades in a state university, showing the mode to be a grade of "C"; and a Phi Beta Kappa key, symbol of excellence in scholarship.

these needs, and the child comes to depend upon her and "identifies himself" with her emotionally. It is thought by some that the child is aware of his mother before he is aware of himself or that the mother and child are at first a common identity. The mother is "internalized" by the infant, with the satisfaction of food and other bodily needs the goal. In due course, the child differentiates himself from his mother and then is faced with the problem of integrating self and mother into a new social system, a two-person, two-role system, with the child taking a subordinate role to the bigger, more powerful mother.[4] Later, it is thought, the child repeats the process for his father. He differentiates his father as a person from his mother and then integrates his father into his social system in new and enlarged ways, which take into account not only his father's relationship to him but to his mother. In this way, the number of "significant others" increases for the child; and the child internalizes, in his mind and imagination, the roles of these others, including the sentiments and tasks that accompany the roles. The mother usually takes the "expressive" role, centering in affection, whereas the father takes the "instrumental" role, organized around discipline and the provision of a livelihood, although there is in reality considerable variation in the degree to which these roles are sex-linked. The child internalizes these roles in his role-taking. The little boy pretends that he is head of the house and has a job and goes off to work in the morning the way his father does. This is what is meant when it is said that the child learns to adjust or conform to the group. He learns that it is expected that the male will be a breadwinner and the fe-

[4] Talcott Parsons and Robert F. Bales, *Family, Socialization and Interaction Process* (Glencoe, Ill.: The Free Press, 1955).

male a comforter. If he is properly socialized, he will one day become a breadwinner; and he will expect to find a wife who will be a loving mother to his children. The number and type of roles with which the growing child becomes familiar increases further when he goes to school, for here he is judged by "universalistic" standards, that is, in terms of competence, rather than by the "particularistic" or personal standards of the home. Still later he will probably learn to identify with an occupation. Investigation [5] has shown that such identification is facilitated by participation in the activities of the chosen occupation and by the acquisition of skills and appropriate occupational ideologies that lead to pride in occupation.

FACTORS IN SOCIAL DEVIATION

As regards the causes of social deviation, the sociologist is interested mainly in the situational and cultural ones; but he cannot assess fully the influence of these factors without also taking into account the role of non-social factors, since all the factors involved in personality are interrelated. It will be recalled that the four factors affecting the social life of man and therefore human personality are biological heredity, natural environment, group, and culture. The problem is to determine, if possible, how much of the change in a given personality from normal to abnormal may be attributed to variation in each of the four factors.

Organic and Functional Disorders

In some cases of mental illness, the roots of trouble are definitely organic. Some of these organic conditions are of an hereditary nature, as in Huntington's chorea and certain types of epilepsy. Others are due to factors of the natural environment, such as the disease germ of syphilis, capable of causing dementia paralytica. Drugs, other diseases, and physical impairment of certain sorts may affect the constitution in such a way as to disorder the mind. Such factors as excessive use of alcohol, encephalitis, brain tumor, arteriosclerosis, and glandular difficulties, may be responsible for impairing the nervous system. Back of many of these physical factors, it should be noted, are larger social factors. Thus alcoholic psychoses would not exist without alcohol, although alcohol is not the only factor in chronic alcoholism. Alcohol is, of course, a cultural factor.

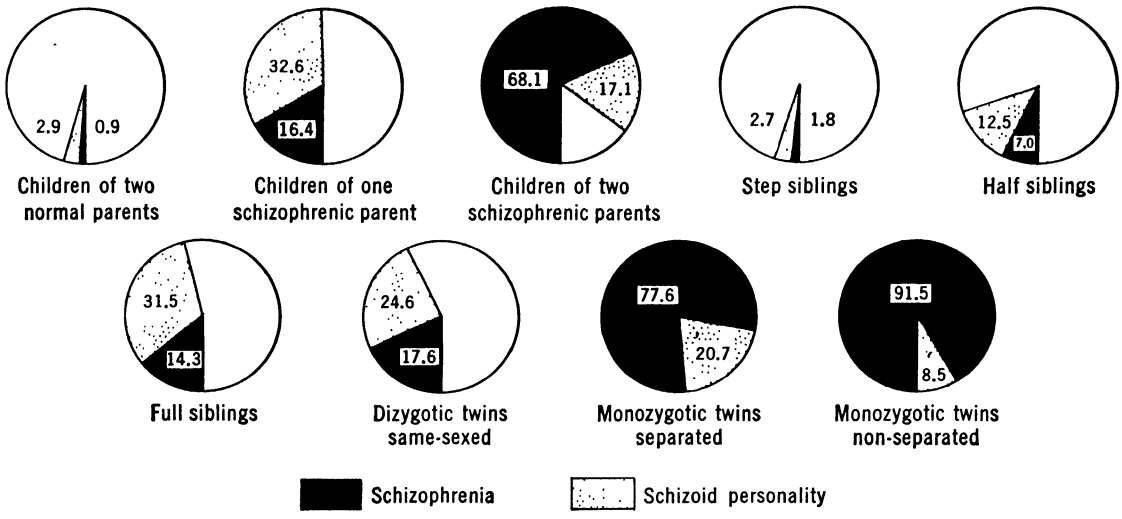
However, for a great many cases (roughly about half of the total number) no physical basis can be found with the instruments of diagnosis now available. These cases are therefore called functional disorders, and the assumption is that the causes must be sought in areas other than organic impairment.

On the other hand, those who emphasize the physical basis of mental disorders say that constitutional factors in the so-called functional disorders will be uncovered when instruments of diagnosis are improved. There have been reports that schizophrenics show brain changes visible under the microscope, and nerve cells containing a low content of an important chemical, polynucleotides.

In the development of functional mental disorders, there are three sets of influences, relating to (*a*) heredity, (*b*) learning in infancy and early childhood, and (*c*) critical social situations, usually in adulthood or near-adulthood.

Hereditary factors in functional mental disorders. Even if constitutional conditions are not found in mental disorders, heredity must still be considered a factor. The argument is that since some individuals sur-

[5] Howard S. Becker and James W. Carper, "The Development of Identification with an Occupation," *American Journal of Sociology*, 61: 289–298, January 1956.



110 **Expectancy of Schizophrenia and Schizoid Personality in Blood Relatives of Schizophrenic Index Cases**

The chances of developing schizophrenia increase in proportion to the degree of blood relationship to a schizophrenic patient, indicating a specific genetic factor in schizophrenia; but since the correlation is not perfect, environmental factors are indicated in the prevention of the disorder. (From Franz J. Kallmann, "The Genetic Theory of Schizophrenia," *American Journal of Psychiatry*, 103:309–322, 1946.)

vive stresses that crush others, the difference must be due in part to inherited differences in ability to resist strain. Studies of the incidence of psychoses among identical twins throw light on this problem. In cases in which the hereditary factor is constant, differences in mental traits must be due to variations in experience. Kallmann[6] studied 794 schizophrenic twins (called index cases) whose co-twins were available for examination at the age of fifteen years. Here were 794 schizophrenics who had twin brothers and sisters. The question was: how many of these siblings also developed schizophrenia? In answer, schizophrenia was found in 85.8 per cent of the monozygotic co-twins (identical twins), but in only 14.7 per cent of the dizygotic (fraternal) twins. This is a highly significant difference. Identical twins have the same heredity, whereas fraternal twins are as unlike in heredity as brothers and sisters born at different times. It is interesting that the rate of schizophrenia for non-twin siblings of schizophrenic patients was 14.3 per cent, nearly the same as for fraternal twins. Among the parents of schizophrenic index cases, the rate dropped to 9.2 per cent, and then declined progressively to 7 per cent for half-siblings, 2.1 for marriage partners, and 1.8 per cent for step-siblings. Clearly, the chances of developing schizophrenia increase in proportion to the degree of blood relationship to a schizophrenic patient.

In interpreting the high incidence of psychosis in both members of pairs of identical twins, the question arises: are not such twins more apt to have similar experiences than dissimilar twins, and may not the high rate

[6] Franz J. Kallman, "The Genetic Theory of Schizophrenia," *American Journal of Psychiatry*, 103: 309–322, 1946. For a fuller statement of the genetic factor in mental disorder, see Kallman's *Heredity in Health and Mental Disorder* (New York: W. W. Norton & Co., Inc., 1953).

of disorders be due to the similar experiences? Kallman found the highest rate for monozygotics who were reared together, 91.5 per cent; but even for those who were separated and reared apart the rate was 77.6 per cent. The evidence is not conclusive because age at separation and degree of separation may be important factors. Yet the data may be interpreted as indicating a specific hereditary factor in schizophrenia, probably recessive and autosomal (not sex-linked).

Favorable environment can neutralize the effect of the unfavorable genetic factor in schizophrenia. In about one-fifth of cases of identical twins reared apart, one twin was not affected. If heredity were the sole determining factor, both twins should have been ill without exception. Schizophrenia is the result not of genetic factors alone but of the subtle interaction of hereditary and environmental influences. The disease is not inherited, only the structure which predisposes to the disease. This is an encouraging conclusion for it means that schizophrenia can be prevented by favorable environmental conditions.

Personality traits predisposing to mental health or illness are established in infancy and early childhood. The environmental conditions which are of the greatest importance for mental health or illness are those relating to the early years of life, for as an earlier chapter showed, these are the years in which the foundations of personality are laid, largely under the aegis of the family. If one relationship is to be singled out as most meaningful, it is the early relation between the child and his mother. This is borne out by a study [7] of the rate of dementia praecox (the term by which schizophrenia was formerly designated) among parents of dementia praecox patients, in which it was found that the disease was somewhat more common among mothers than fathers, the rates being 9.1 and 3.7 per cent respectively. If heredity alone were responsible the rate of psychosis would be the same for both parents since each contributes 50 per cent to the child's heredity. The greater incidence among mothers indicates that social factors are present, and confirms the point made earlier that children are influenced by their mothers more than by their fathers. The father's influence is ordinarily not inconsiderable, however, as compared with the influence of persons outside the family.

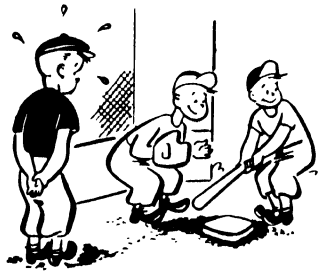
If as an illustration of functional mental disorder, we take the most common disorder, schizophrenia, with its salient characteristic of seclusiveness (except for the catatonic type), we may ask: what sort of early childhood experience centering in the family helps to develop seclusive tendencies in a child? Too little affection of parent for child, or actual hostility, may be a factor. The child who feels rejected by his parents may withdraw from them and others into a world of fantasy and live in his daydreams. Or the failure of a child's parents to teach him the skills needed for effective group participation, especially the skills in sports and games of other children, may be an isolating influence. Too much affection is also bad, especially if it is unintelligent, for the overprotected child may have difficulty in adjusting to others outside the family who do not show him special consideration.

Isolation from others has long been recognized as a symptom of schizophrenia, but it is not clear whether the isolation is cause or effect. Prisoners in solitary confinement may show schizoid traits.[8] When census tracts in

[7] H. M. Pollack, B. Malzberg, and R. G. Fuller, "Hereditary and Environmental Factors in the Causation of Dementia Praecox and Manic-Depressive Psychoses," *Psychiatric Quarterly*, 7: 450–479; 8: 77–97, 337–371, 553–599; 9: 129–142, 287–296.

[8] R. E. L. Faris, "Cultural Isolation and the Schizophrenic Personality," *American Journal of Sociology*, 40: 155–165, September 1934.

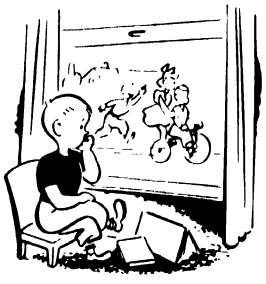
The child who . . .



lacks DEXTERITY and APTITUDE in sports,



HAS NO HOBBIES, unless only reading,



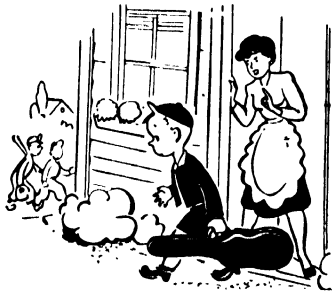
no FRIENDS,



and is AFRAID of the opposite sex, may get TOO frustrated at adolescence.

Then he may begin the process of SCHIZOID WITHDRAWAL, shutting out the overpowering, frustrating outside world and retreating into wish-fulfilling FANTASY.

It is particularly unfortunate . . .



if he has a DOMINATING MOTHER PERSON who is PERFECTIONISTIC and who runs his life through LOVE or PRESSURE of a kind which is difficult to resist without guilt . . .

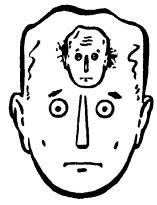


so that the only way that he can get away from her and assert his own wishes is in DAYDREAMS.



This may progress into a FULL-BLOWN SCHIZOPHRENIA.

The essence of SCHIZOID WITHDRAWAL is a shifting of interest away from people, with consequent withdrawal of attention from the cues of manner, posture, voice, by which we recognize how another person feels. The layman will often recognize and describe the schizoid manner by saying, "He seemed to be in another world." "He didn't seem to feel I existed."



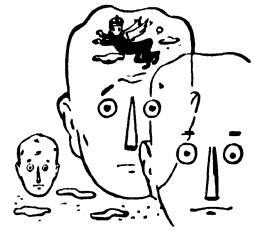
In SCHIZOID WITHDRAWAL, the hurt person becomes preoccupied with himself.



Thought ceases to be a means of solving problems, a guide to dealing with reality,



and becomes a means of escape from REALITY into autistic wish-fulfilling FANTASY.



Then the thinking may become so preoccupied with itself it may begin to stop checking its processes against the touchstone of experience.

111 Some Causal Factors in Schizophrenia and the Nature of the Disorder

(Taken from Veterans Administration Pamphlet 10–36, *A Hypothesis of Schizophrenic Behavior,* Veterans Administration, Washington 25, D.C. Initially prepared in 1950 as a scientific medical exhibit by Dr. Richard L. Jenkins and Dr. Lucy D. Ozarin, Psychiatry and Neurology Service, Department of Medicine and Surgery, Veterans Administration, Central Office.)

Austin, Texas, were compared, it was found that in areas with the highest rates of schizophrenia, the residents knew significantly fewer names of their neighbors and the number of reported friends and acquaintances was smaller than in areas with low rates of schizophrenia.[9] But when, in another study,[10] a group of schizophrenics was compared with a normal group, with age, sex, occupation, family composition, and residential area controlled, the data did not support the hypothesis that social isolation in adolescence is a predisposing cause of schizophrenia. Only one-third of the schizophrenics were isolated in adolescence. Nor was there evidence that the isolates were prevented from interacting with peers because of lack of available playmates, excessive residential mobility, severe illness, or parental restrictions. It is suggested that the abnormal personality of the schizophrenic probably leads not to isolation but to alienation. Inadequacies in social relationships, both within and outside the family, cause certain individuals to feel that they do not really

[9] E. Gartly Jaco, "The Social Isolation Hypothesis and Schizophrenia," *American Sociological Review,* 19: 567–577, October 1954.

[10] Melvin L. Kohn and John A. Clausen, "Social Isolation and Schizophrenia," *American Sociological Review,* 20: 265–273, June 1955.

belong to their peer groups. Alienation may lead to compulsive interaction as well as to social isolation.

The social strains of later life may be precipitating factors. Ordinarily schizophrenia makes its first appearance between twenty and forty years of age. In fact, mental disorders in childhood are unusual, and it is not until adolescence or later that they usually become severe enough to require institutionalization, although there are many exceptions. Much learning takes place in infancy and early childhood that ill equips the individual for life with others. Why, then, do the disorders not develop until later? The causes are complex, but one reason is that children — those with unfortunate preparation included — are shielded by our culture from the consequences of their handicaps. The child's role is a protected, dependent one. If he is a seclusive child, this trait may be described as shyness and accepted with little censure. As he grows older, his shyness becomes more and more noticeable and an increasing handicap if it prevents him first from entering into the activities of the gang, and later from having normal relations with the opposite sex. As an adult or near adult, new roles await him requiring independence, responsibility, decision. Now he must begin to think of supporting himself and choosing a mate. There is the strain of the competitive economic struggle, which may be rendered acute by loss of money or job. There is the conflict of moral codes, of wishes and standards, intensified in adulthood. There are the burdens of war, the emotional shocks of unrequited love, of divorce, of loss of relatives and friends. The social demands upon him are heavier than when he was a child or a youth and his weaknesses are magnified.

How mental disorders are related to social stress has been shown in detail in studies of men who falter on the field of battle. During World War II a great many soldiers experienced "battle fatigue." They developed disabling symptoms, such as stomach ulcers or heart disorders, so they could no longer serve actively at the front. Medical examination would often show these symptoms to be psychosomatic, that is, involving both psychological and physical factors. Others developed abnormal psychological reactions without physical disabilities. These were men afraid of war, overwhelmed by the horror of mutilation and death. The natural impulse would have been to run away. But they were soldiers with a duty to perform. If they deserted they would be branded cowards and the thought of such disgrace was unbearable. In some cases the powerful clash of wishes was solved unconsciously by taking on physical symptoms which are acceptable excuses for inaction in our culture. After V-E Day, there were many sudden cures.

A clash of irreconcilable desires produces what is known as a mental conflict. Since many human desires are socially determined, and all are socially influenced, mental conflicts are related to group experience. Indeed, mental conflicts often merely reflect conflicts that exist in the culture itself. In the case of the war neuroses, the cultural factors are very plain. Unlike the Spartans, we in our civilian economy train men mainly in the arts of peace, not in the arts of war. Yet we fight wars periodically and have the idea that a man is a coward if he runs away from the enemy who may hurt or kill him. We are accustomed to creature comforts which in war give way to physical hardships. In our democracy we learn to prize habits of independence and freedom that must be surrendered in the armed forces with their codes of restrictive discipline and authority. The strength of the cultural pressures is important, as may be seen from the fact that there were relatively more cases of battle fatigue among British and American soldiers than French soldiers. French soldiers who

felt afraid were more likely to say so, and not so likely to feel ashamed of their fear. This reflects a significant difference in the teachings of the two cultures, for the sense of shame plays an important part in mental disorders. Some psychiatrists doubt that a psychosis can develop without strong feelings of guilt; and a guilty conscience mirrors the sentiments of the group.

The experiences of wartime effectively emphasize a point of the first importance, namely, that mental illness is a function of (*a*) the severity of emotional stress as well as (*b*) the abnormality of childhood conditioning and (*c*) hereditary weakness. Examination of war neuroses [11] disclosed cases of minimal stress resulting in severe symptoms. For instance, the mere anticipation of being sent to the front might cause a breakdown. These cases reflect a previous disorder usually extending back to early childhood.[12] In the great majority of cases, however — and there were some three million inductees in World War II who experienced some kind of mental breakdown — the disorders developed only after long exposure to severe stress.[13] Indeed, as the investigators emphasize, if the stress is severe enough, even the emotionally healthy may develop neurotic-like behavior. This means that most "battle fatigue" is due less to pre-existing emotional weakness than to the pressure of external events leading to a breakdown in the ability to deal with anxiety. For this reason, some authorities limit the term "war neurosis" to those cases where prior to the war disturbance the personality was stable.

CULTURE AND PERSONALITY DEVIATION

The student of sociology notes that back of all deviant individuals are great social and cultural stresses; and while it is true, as Alexander says, that "the main aim is to understand each individual in terms of his own life history," [14] this history cannot be adequately appreciated without taking the larger social forces into account. Unless we know the culture we cannot understand why the number of individuals who develop mental disorders is greater in some societies than in others, or is greater in some communities or classes than in others within the same society. Nor can we understand why certain types of disorder appear more often in one place than in another.

Cultural Variation in Mental Disorders

An illuminating approach to the problem of factors in personality deviation is through the study of comparative cultures and subcultures. For most groups, the existing evidence is not good, for few peoples keep accurate records of mental disorders or, for that matter, any records at all. There is available, however, a census which was taken in 1951 of every person who was then or ever had been mentally ill, among the Hutterites.[15] The Hutterites are a fairly closed Anabaptist religious sect of 8,542 people of German stock living at the time of the Census in ninety-eight communities in the

[11] Roy R. Grinker and John P. Spiegel, *Men Under Stress* (Philadelphia: Blakiston Company, 1945).

[12] Edward A. Strecker, *Their Mothers' Sons* (Philadelphia: J. B. Lippincott Company, 1946).

[13] Anxiety symptoms when measured showed little change with increasing time in the Army, except for an initial rise early in the soldier's career. Overseas service brought a real though slight increase, but combat induced a high level of anxiety. The closer to combat, the more likely and the more intense the fear reactions. S. A. Stouffer *et al., The American Soldier,* Vol. 2 (Princeton, N.J.: Princeton University Press, 1949), Chapter 9.

[14] Franz Alexander, "Psychoanalysis and Social Disorganization," *American Journal of Sociology,* 42: 781–795, May 1937.

[15] Joseph W. Eaton and Robert J. Weil, *Culture and Mental Disorders* (Glencoe, Ill.: The Free Press, 1955).

Dakotas, Montana, and the prairie provinces of Canada. They are set apart from other groups by their religious beliefs, which emphasize cooperative activity and the simple life. They own all property jointly, eat as a body in a common dining hall, and pay all expenses, such as doctor's bills, out of a common treasury. They disdain jewelry, art, overstuffed chairs, radios, motion pictures. They think a grammar school education is enough. They engage in highly mechanized farming and trade with their neighbors, the business of each colony usually exceeding $100,000 a year.

In the summer of 1951, it was reported that there were 199 persons who had shown symptoms at some time in their lives which the research staff diagnosed as mental illness. This included mental deficiency as well as psychoses, neuroses, epilepsy, and personality disorders. The ratio was thus 1 in 43, much less than for the United States in general. Even so, the Hutterite rate was not so low as that of the population of the island of Formosa, where a somewhat similar study has been made. So far as psychotic manifestations were concerned, the Hutterites had a relative frequency only slightly lower than hospitalization for mental illness in New York state.

Is the lower rate of mental disorders among the Hutterites to be ascribed to more favorable cultural factors, like the close identification of the members one with another and the affection and security which the group provides? A cultural explanation is inviting, but the genetic factor cannot be ruled out. The Hutterites are closely inbred. All are descendants of 101 married couples and children who migrated to the United States between 1874 and 1877. Marriage with outsiders is considered a sin. Nearly half of all the families in 1950 had one of three surnames: Hofer, Waldner, and Wipf.

The distribution of mental disorders among the Hutterites is different from that in other societies. In populations generally, schizophrenia is the most common mental disorder. The ratio of schizophrenic patients to manic-depressive patients among the Hutterites was .23, whereas in other populations it exceeds 1.00. Again, a genetic interpretation is possible, since manic-depressive psychoses occur more often in certain family lines than in others. Over against this is the more confident interpretation in terms of what is known about the values of the culture. Schizophrenia is characterized by withdrawal from others, and this is difficult in Hutterite society. On the other hand, the culture emphasizes service to the community; and the depressive states can be seen as an intensification of the sense of unworthiness experienced by those who feel that they do not measure up to the expectations of the group. This interpretation jibes with other findings that social isolates like farmers and unattached city dwellers show relatively high rates of schizophrenia, whereas manic-depressive reactions are more prominent among professional, socially prominent, and religious persons.

The cultural factor is conspicuous in the absence among the Hutterites of psychoses due to drugs, alcoholism, or syphilis, whereas 12.8 per cent of first admissions to state hospitals in the United States are for these reasons. It appears that Hutterite mental deviation is more anti-self, less anti-social. Investigators did not find a single case of murder, arson, severe physical assault, or sex crime. There had been only two suicides since 1874, both within the five years preceding the survey.

The experience of the Hutterites suggests that there are ethnic differences in types of social stress and that these may be related to types of personality deviation. There is supporting evidence of differences among Irish, Jewish, Italian, and Yankee-American groups in the Boston area in the mental stress in families with psychotic children.[16] The



112 Communal Activity Among the Hutterites

Schizophrenia among the Hutterites is less common than among Americans generally, perhaps because of the emphasis on cooperative group life, which gives the individual a strong sense of security. But such practices may also limit innovation. Here we see all the women from King Colony assembled after lunch to put up green beans picked that morning in the garden. They work along at a fast pace, joking, playing games on each other. Procedure is like mass production in a highly organized small factory: some women cut beans, others sterilize bottles, cook beans in huge caldrons over the wood stove. The beans will be one year's supply for the entire colony. (Photo by C. Bernstein from Black Star.)

son in the Irish family who develops stress feels it particularly in relation to his mother, who shows solicitude for him but a lack of overt affection, coupled with strict discipline and little reward for parentally approved behavior. The father too frequently belittles his son but engenders little conflict because the number of situations in which the mother dominates is so much greater. In the Jewish home, stress between mother and son, when it occurs, is said to be occasioned by her highly emotional, overtly affectionate relationship to her son, a relationship controlled by the withdrawal of love. The reaction of the son is said to be a highly ambivalent one, compounded of exaggerated dependency and deep-rooted repressed hostility. The relationship of the Italian mother to her son, when it fosters stress, is apt to be different still. The mother is likely to be oversolicitous and acts as a buffer between son and the punishing father, who is the dominant figure in the family, and to whom the son's reaction is one of fear-ridden respect. The son in the Yankee-American family, different still, experiences stress because he competes with siblings for parental affection and because the moral implications of conduct are stressed rather than the effect of behavior

[16] Paul Barrabee and Otto Von Mering, "Ethnic Variations in Mental Stress in Families with Psychotic Children," in Arnold M. Rose (ed.), *Mental Health and Mental Disorder* (New York: W. W. Norton & Co., Inc., 1955), pp. 161 ff.

Table 10 · Distribution of Normal and Psychiatric Population by Social Class*

SOCIAL CLASS	NORMAL POPULATION†		PSYCHIATRIC POPULATION	
	Number	Per Cent	Number	Per Cent
I	358	3.1	19	1.0
II	926	8.1	131	6.7
III	2,500	22.0	260	13.2
IV	5,256	46.0	758	38.6
V	2,037	17.8	723	36.8
Unknown‡	345	3.0	72	3.7
TOTAL	11,422	100.0	1,963	100.0
$P < .001$			$X^2 = 408.16$	

*From August B. Hollingshead and Frederick C. Redlich, "Social Class and Psychiatric Disorders," in *Interrelations Between the Social Environment and Psychiatric Disorders* (Papers presented at the 1952 Annual Conference of the Milbank Memorial Fund; New York: Milbank Memorial Fund, 1953), p. 202.

†These figures are preliminary, they do not include Yale students, transients, institutionalized persons, and refusals.

‡The unknown cases were not used in the calculation of X^2. They are (1) individuals drawn from the sample and (2) psychiatric cases whose class level could not be determined because of paucity of data.

on interpersonal relationships. These are some of the sources of stress which differentiate family life of psychotics in one ethnic group from another. They leave unanswered the question of why one son in a family succumbs to the stress, whereas another son is able to tolerate it.

There are social-class differences in psychiatric disorders. Social classes are large inclusive groups with distinctive cultural traits that set them apart from one another. In a study [17] of the New Haven urban community, the population was grouped by social class based on occupation, education and place of residence; also a census was taken of residents under psychiatric care, whether patients of a psychiatrist, clinic or hospital. As may be seen in Table 10, the highest class with 3.1 per cent of the population contributed 1.0 per cent of the psychiatric population, whereas the lowest class comprised 17.8 per cent of the population and 36.8 per cent of the psychiatric population. The type of psychiatric disorder is also related to social class. Neuroses, which are more moderate disorders, are concentrated at the higher levels and the more serious psychoses at the lower levels. The index of prevalence of schizophrenia, a severe disease, is 11.2 times as great in the lowest as in the highest classes.

Other data [18] indicate that neurotic and schizophrenic patients were more upwardly mobile than the average population. Also, in the psychiatric patients there is a discrepancy between achieved and aspired mobility.

Is normality a relative concept? We observe that the incidence of mental disorders varies in different societies. The question arises: is personality deviance socially defined or are there absolute standards of psychological abnormality? The evidence indicates that standards of normality are in part relative to culture. Behavior which is approved in one society may be condemned

[17] A. B. Hollingshead and F. C. Redlich, "Social Class and Psychiatric Disorders," in *Interrelations Between the Social Environment and Psychiatric Disorders* (New York: Milbank Memorial Fund, 1953).

[18] A. B. Hollingshead and F. C. Redlich, "Social Mobility and Mental Illness," *American Journal of Psychiatry*, 112: 179–185, September 1955.



113 Sex-Typing and Deviation

Personality traits are identified as masculine or feminine in societies like the United States, where personality is specialized by sex. In such a situation, overidentification with a member or members of the opposite sex in early life may lead to deviant types like the "tomboy" and the "sissy." There are societies, of which the Arapesh and Mundugumor are examples, that do not differentiate temperamental traits as masculine or feminine and in which both sexes are temperamentally alike.

in another. Deviant behavior may be recognized as such, but valued differently by different societies. In the United States in the middle of the twentieth century, epileptic seizures are regarded as symptoms of illness, whereas in some societies they are thought to be signs of supernatural power.

Cultural norms vary, and in theory they may vary without limit; but in reality there are limits to cultural variations because mankind is one species with common problems, and the preferred solutions are limited in number. Thus all cultures taboo incest because the practice is destructive of family organization, which is essential to social order. Nearly all societies forbid stealing from a member of the group.

Despite the foregoing, it may be argued that there are universal cultural judgments, that certain behavior patterns are considered abnormal in all cultures, that pan-human standards of normality may be defined in terms of the role of a set of symptoms in the total behavior of the individual.[19] Are the Kwakiutl Indians of the Pacific Northwest paranoiac? Does their culture so institutionalize paranoia as to legitimatize it and thus rule out the possibility of a paranoiac being a deviant type in the society? When the self-esteem of the chief is injured, he arranges a "potlatch ceremony." The slightest provocation will suffice: the potlatch victory of a rival or the accidental death of a wife. In the potlatch, as we noted in a preceding section, there is lavish distribution of property, accompanied by narration aiming at self-glorification and the ridicule of one's opponent. Is this institutionalized paranoia of a moderate, episodic sort? It is paranoid behavior, although not recognized as abnormal by the culture. It is not so extreme as the delusions of the paranoiac in the psycho-

[19] Henry J. Wegrocki, "A Critique of Cultural and Statistical Concepts of Abnormality," *Journal of Abnormal and Social Psychology*, 34: 166–178, 1939.

pathic hospital; but mental disorders, it will be recalled, vary in degree. The institutionalization of paranoid behavior in the potlatch does not rule out the possibility that the group will regard other expressions of paranoia as abnormal and undesirable. If one of the chief's followers were to claim that the chief was a pretender and he was the real chief, the tribe would scarcely think him normal.

Cultural Factors Unfavorable to Mental Health

The conflict of biological impulses and cultural directives. How shall we account for the fact that some societies have more mental disorders than others? There seem to be at least two different kinds of social conditions that are productive of mental stress. The first is that a culture may make excessive demands on individuals. To be sure, without discipline of the biological impulses of man, such as his sexual impulses, social order would be impossible. As was noted earlier, if it were not for the incest taboo, family discipline could not be maintained. No harm is done by this cultural sanction so long as there are other approved ways of obtaining satisfaction of the sexual impulses. But sometimes the cultural norms are excessively prohibitive or negative. Thus the Manus of New Guinea believe that sex is sinful and is properly used only for reproduction. The marital relationship lacks warmth and tenderness, and is instead a source of frustration and antipathy. The Trobrianders, on the contrary, have a naturalistic attitude toward the sexual function, and it is reported [20] that there is little deviant sex behavior in Trobriand society and that marital adjustments are conspicuously good.

It is an interesting question how far the cultural norms can, without injury to man, depart from the biological norms. For man is an animal, and his biological nature must be reckoned with. Actually, in many instances, cultures appropriate and socialize the biological norm. Thus the biological norm is good health, since most animals are well most of the time. In the main, cultural norms advocate good health.

Conflicts within a culture may be a source of mental conflicts. Extreme cultural norms, that is, those that take an uncompromising all or none position with regard to permissible behavior, are more likely to contribute to mental stress than are more moderate norms, especially when the extreme norms are those of a subculture and are in conflict with the norms of the dominant group. An example is the finding of a study [21] that, as compared with Jews, Mormons report more frequent intoxication and more social complications attributable to drinking. These differences cannot be accounted for by quantity–frequency indexes, since the Mormons drink the least. The explanation appears to be that Mormon culture enjoins complete abstinence, hence if drinking behavior is adopted, the behavior itself represents rejection of social ideas. Jewish culture, on the contrary, has well-defined drinking customs closely integrated with family and religious structures. There are other cultures, such as the Hutterite, which like the Mormon culture enjoin complete abstinence from alcohol and in which intoxication does not occur, perhaps because the Hutterite culture is more completely insulated against the influences of the larger culture which sanctions drinking. However, if deviation from the accepted role occurs, extremes of conduct are more likely, since the behavior in any degree represents a rejection of the cultural directive.

[20] B. Malinowski, *The Sexual Life of Savages in Northwestern Melanesia* (New York: Halcyon House, 1941).

[21] Robert Straus and Seldon D. Bacon, *Drinking in College* (New Haven, Conn.: Yale University Press, 1953).

A society may be divided against itself culturally. This is true in the United States, for example, where a number of different cultures live side by side, competing with one another. Rapid social change in culture has much the same effect, since it creates new ideas and new standards which may be at variance with the old, which also persist. There are so many different ideas of what is right and of what is true in our society that individuals frequently find it difficult to develop an integrated personality.[22] Even within one's own family there may be a bewildering array of sentiments and loyalties, as Mead so strikingly indicates:

> . . . the girl's father may be a Presbyterian, an imperialist, a vegetarian, a teetotaler . . . a believer in the open shop and a high tariff, who believes that woman's place is in the home, that young girls should . . . not smoke, nor go riding with young men in the evening. But her mother's father may be a Low Episcopalian, a believer in high living, a strong advocate of States' Rights and the Monroe Doctrine, who reads Rabelais, likes to go to musical shows and horse races. Her aunt is an agnostic, an ardent advocate of woman's rights, an internationalist who rests all her hopes on Esperanto, is devoted to Bernard Shaw, and spends her spare time in campaigns of antivivisection. Her older brother, whom she admires exceedingly, has just spent two years at Oxford. He is an Anglo-Catholic, an enthusiast concerning all things medieval, writes mystical poetry, reads Chesterton, and means to devote his life to seeking for the lost secret of medieval stained glass. Her mother's younger brother is an engineer, a strict materialist, who never recovered from reading Haeckel in his youth; he scorns art, believes that science will save the world, scoffs at everything that was said and thought before the nineteenth century, and ruins his health by experiments in the scientific elimination of sleep. Her mother is of a quietistic frame of mind, very much interested in Indian philosophy, a pacifist, a strict non-participator in life, who in spite of her daughter's devotion to her, will not make any move to enlist her enthusiasms. And this may be within the girl's own household. Add to it the groups represented, defended, advocated by her friends, her teachers, and the books she reads by accident, and the list of possible enthusiasms, of suggested allegiances, incompatible with one another, becomes appalling.[23]

The situation is, indeed, even more complicated than that described. The members of this family are doubtless not so consistent as they are made to appear. The father may be imperialistic, yet in actual wartime vigorously oppose the selective draft if it includes his own son; the pacifist mother, once her own country is involved, may be convinced this is the war to end all wars. The heterogeneous nature of our culture is reflected not only in the great variety of attitudes that are held by different persons but also in the contradictory and conflicting attitudes of the same individual. Inquiry[24] into the child-training practices of parents of 162 five- and six-year-old rural Wisconsin children showed that inconsistent child-training practices are the rule. For example, parents who use permissive techniques in feeding, tend nevertheless to punish their children for misbehavior.

Culture conflicts in modern society. Cultural contradictions in society become mental conflicts in individuals and the source of mental disorders. This point has been

[22] "So far as mental disorder is concerned, the significant question is . . . whether the (social) system . . . is unified by a nucleus of common values. When the structure embraces conflicting principles of social organization based on the incompatible values, psychic conflicts inevitably result." (Kingsley Davis, "Mental Hygiene and the Class Structure," *Psychiatry,* 1: 63, February 1938.)

[23] Margaret Mead, *The South Seas,* pp. 202–203. Copyright, 1928, 1930, 1935, 1939, by Margaret Mead. By permission of William Morrow and Company, Inc., and Jonathan Cape, Ltd.

[24] W. H. Sewell, P. H. Mussen, and C. W. Harris, "Relationships Among Child Training Practices," *American Sociological Review,* 20: 137–148, April 1955.

THREE INVENTORIES OF DOMINANT AMERICAN VALUE ORIENTATIONS

KLUCKHOHN & KLUCKHOHN	WILLIAMS	GILLIN
View of Life	(1) "Achievement" & "Success" "Activity" & "Work"	(1) Personal Output of Energy
(1) "Effort & Optimism"	(2) "Moral Orientation"	(3) Pragmatic Ingenuity Mechanistic World View Mobility of the Person
(2) (a) "Moral Purpose"	(7) "Humanitarian Mores" Efficiency & Practicality	(4) Change & Novelty
(3) (b) "Rationalism"	(4) Progress	(1) Optimism
The Individual in Life	(6) Material Comfort Equality Freedom External Conformity	(5) Individualism Competitiveness "Fair Play" Cooperation in Common Welfare Honesty or Frankness Prestige Power
(5) "Romantic Individualism" (a) Cult of the Average Man (b) Tendency to Personalize	(3) Science & Secular Rationality Nationalism-Patriotism Democracy	(6) Recreation Efficiency
Individual and Social Values	(5) Individual Personality Racism & Related Group-Superiority Themes	(7) Love
(4) Change a Value in Itself		(2) Inner-Regulated Morality
(6) "Pleasure Principle" "Externalism" "Simple Answers" Humor		
(7) Generosity		

114 Dominant American Values

The numbers in parentheses represent the seven value orientations on which the three lists are in agreement. It will be noted that the values are not always consistent, as in the case of work and pleasure, and individualism and humanitarianism. One result of these culture conflicts is strain and maladjustment. (From Joseph S. Himes, "The Organization of American Values: A Theoretical Model," *Alpha Kappa Deltan*, Autumn 1956, p. 17. Sources: Clyde and Florence Kluckhohn, "American Culture: Generalized Orientations and Class Patterns," in Lyman Bryson *et al.*, eds., *Conflicts of Power in Modern Culture*, New York, Harper, 1947; Robin M. Williams, *American Society*, New York, Knopf, 1951; John Gillin, "National and Regional Cultural Values in the United States," *Social Forces*, 34:108–110, 1956.)

well developed by Horney,[25] who shows that despite variations due to differences in heredity and life experiences, there is a common element in neuroses in our society because they are produced by conflicts which are general in our culture. Neurotics are torn between aggressiveness and timidity, between the making of excessive demands and the fear of failure, between striving for status and feelings of inferiority. In much the same manner our culture is divided against itself. On the one hand it teaches the transcendent value of brotherly love, of friendship, and unselfishness. The way to find happiness, we are told, is to live for others, not for self. On the other hand, our culture stresses intense individual competition. Whether it be in school, in business, or in sports, we are engaged in a contest for superiority over others. To get to the top is the goal, which involves leaving others at the bottom. One man's success is another man's failure. A result of such competition

[25] Karen Horney, *The Neurotic Personality of Our Time* (New York: W. W. Norton & Co., Inc., 1937), Chapter 15.

is the growth of hostility between individuals; another is fear lest one fail. The latter may be particularly pronounced since the chances of failing are much greater than the chances of succeeding. The fear of failure, moreover, is intensified by our false ideology; if an individual fails, we are apt to say it was his own fault, a sign of some inadequacy on his part. The role of luck, exploitation, and circumstances are largely ignored. The belief that one has failed leads to lowered self-esteem and a sense of isolation from others that is painful.

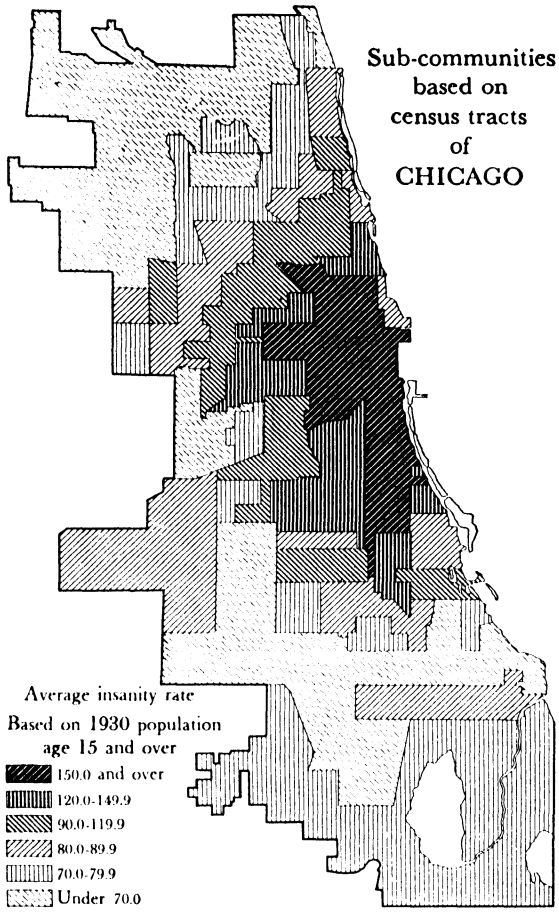
A second basic cleavage in our culture is the intense stimulation of desires and the limitations imposed on satisfying the desires. For example, our culture uses numerous methods like high-pressure advertising and installment buying to whet the human appetite for more goods and satisfactions — that is, for a higher standard of living. But it is much easier to create wants than to supply the means of satisfying them. To widen the gap between what people want and what they actually have or can reasonably expect to have is to make for widespread discontent and nervousness.

Some individuals learn to tolerate conflict better than others. All of us are, of course, exposed to these contradictions in our culture. Most people tolerate such conflict reasonably well and do not become neurotic. The reasons for these varied adjustments are not altogether clear but, besides constitutional differences in resistance to strain, there are differences in how individuals learn to cope with cultural conflicts. Some avoid conflict by learning to conform without undue stress to the one set of contradictory norms or the other; others seek a compromise solution.[26] Those who, for one reason or another, experience the conflicts of our culture in accentuated form are likely to become neurotic. They may be called, says Horney, "the stepchildren of our culture."

The ecology of mental disorders in Chicago shows that they are not randomly distributed. This thesis gets factual support from a study of the distribution of mental disorders in Chicago,[27] which shows a dynamic association between the cultural areas of the city and the mental health of the populations occupying them. The investigation covered 7069 first admissions to Cook County Psychopathic Hospital, 1930–31, 28,763 Chicago cases admitted to four state institutions, 1922–34, and 6101 private hospital cases from the eight largest private hospitals in Chicago, 1922–34. The addresses of these patients were plotted on a map. Ratios of mental disorders for the various neighborhoods were then obtained by computing the number of cases in the area per 100,000 population fifteen years old and over. The ratios ranged from 48 to 499; that is, the neighborhood with the greatest proportion of commitments for mental disorders had more than ten times the ratio of the district with the lowest proportion. There was a regular decrease in the relative number of cases as one moved from the center of the city out toward the periphery. Concentration of high rates were found in the rooming-house districts, in Hobohemia (the area of homeless men), in certain Negro areas, and in the slum districts of the foreign born. The lowest rates occurred in the outlying residential districts, the lake front, and hotel and apartment-hotel neighborhoods. The high Negro rate does not indicate a racial factor, for considerable variation in the rate appeared within the area, the highest being in the most deteriorated areas. The areas characterized by high rates of mental disorganization are also the ones which have been shown by other studies to be marked by

[26] S. A. Stouffer, "An Analysis of Conflicting Social Norms," *American Sociological Review*, 14: 707–717, December 1949.

[27] R. E. L. Faris and H. W. Dunham, *Mental Disorders in Urban Areas* (Chicago: The University of Chicago Press, 1939).



115 **The Distribution of Mental Disorders in Chicago**

From Robert E. L. Faris and H. Warren Dunham, *Mental Disorders in Urban Areas*, Chicago, The University of Chicago Press, 1939, Map V.

high rates of social disorganization; that is, by high rates of poverty, unemployment, infant mortality, disease, and the like.[28]

The conclusions for Chicago are substantiated by studies [29] made in other industrial cities which show the same tendency for cases of mental disorders, as measured by commitments, to concentrate in interstitial areas. The schizophrenic rate follows a pattern of distribution very similar to that of mental disorders in general, whereas the manic-depressive rates show a much wider scatter within the city, perhaps because manic-depressives are characterized by strong ego drives which may be correlated with success in acquiring money. The latter gives support to the "drifter" theory which holds that people living in the center of the city are those who failed emotionally and then drifted there,[30] but this theory is contradicted by the finding that schizophrenic patients are more upwardly mobile than the average population. An alternative hypothesis is that life in the low-income, foreign-born areas is harder, the struggle sharper; consequently, more personalities have difficulty in making satisfactory adjustments than in other areas. It is also reported [31] that higher rates for mental disorders are recorded by those who move frequently in contrast to those who reside for a long period in the same house. These conclusions have been criticized because they rest on the assumption that hospitalized cases are a representative sample of all cases, whereas there is some evidence that the factors which make for the selection of cases for mental hospitals are not the same in all localities of a city.[32] This may change the pattern somewhat, but it probably does not obliterate it.

The findings reported above are for com-

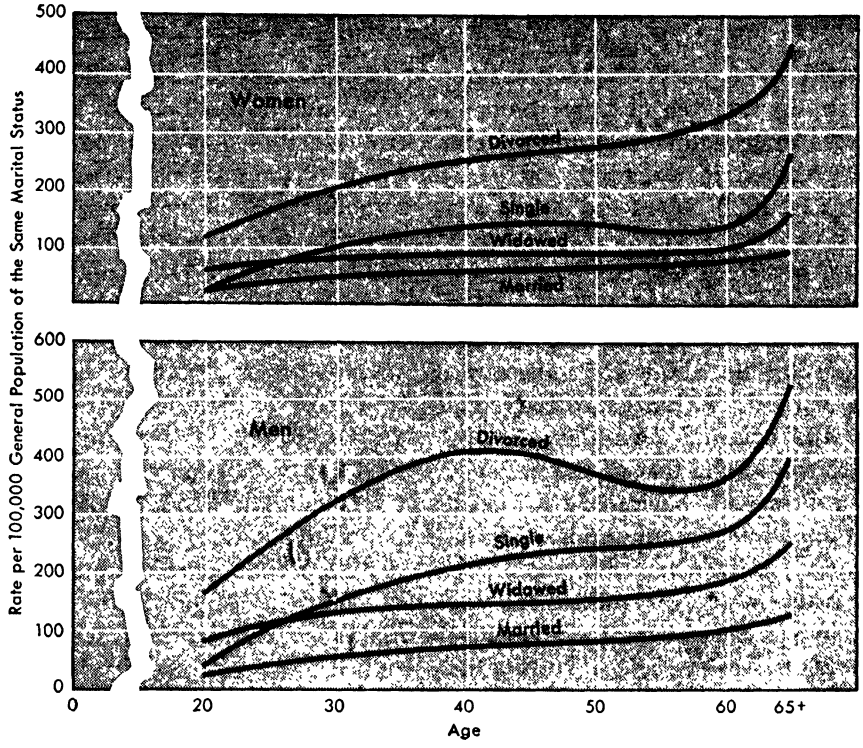
[28] This study also shows that certain types of mental disorder are not uniformly distributed, but rather are concentrated in particular areas. It is difficult to appraise this finding, however, in view of the fact that present diagnosis and classification of mental disorders are somewhat arbitrary.

[29] Clarence W. Schroeder, "Mental Disorders in Cities," *American Journal of Sociology*, 48: 40–47, July 1942. Cities studied were St. Louis, Milwaukee, Omaha, Kansas City, and Peoria.

[30] H. Warren Dunham, "Current Status of Ecological Research in Mental Disorder," *Social Forces*, 25: 321–326, March 1947.

[31] C. Tietze, P. Lemkau, and M. Cooper, "Personal Disorder and Spatial Mobility," *American Journal of Sociology*, 48: 29–39, July 1942.

[32] Mary Bess Owen, "Alternate Hypotheses for the Explanation for Some of Faris' and Dunham's Results," *American Journal of Sociology*, 47: 48–52, July 1941.



116 Marital Status and Admission to Mental Hospitals

Above is shown the number of first admissions to state mental hospitals in the United States during 1933, by marital status, expressed as the rate per 100,000 of the general population of those of corresponding marital status as of 1930. The married have a more favorable rate than others. Selection of more favorable types for marriage might explain the difference between the married and the single, but would hardly account for the higher rate among the widowed. (From Carney Landis and James D. Page, *Modern Society and Mental Disease*, New York, Farrar and Rinehart, 1938, p. 70, Figure 9.)

mercial-industrial cities. An investigation [33] of Austin, Texas, a capital city, showed a different distribution of mental disorders with no decreasing rates from the center to the periphery. While high rates were found in the central business district, high rates were also found in other neighborhoods near the edge of the city. Different types of cities may have different distributions of mental disorders, but it is clear that mental disorders are not randomly distributed.

The thesis that conflict in personal life tends to increase the probabilities of developing a mental disorder gets support from the figures on the relation of marital status and insanity. Figure 116 shows the rates for first admissions to hospitals for the insane to be considerably greater for the divorced population than for the married population.

If these observations on the relation of culture to insanity are correct, then it follows that the amount of mental health in a society will be correlated with the degree to which its culture is (1) integrated and (2) consistent with the biological nature of man. This thesis is receiving increasing support from accumulating evidence. It seems to be borne out by the testimony already supplied. It is

[33] Ivan Belknap and E. Gartly Jaco, "The Epidemiology of Mental Disorders in a Political-Type City, 1946–1952," in *Interrelations Between the Social Environment and Psychiatric Disorders.*

also buttressed by a particularly revealing study [34] of the mental life of inhabitants in five different American communities. The conditions described in the following paragraphs are as of 1929, when the study was completed.

Mental health in five communities of varying cultural complexity. These settlements are in hollows in the Blue Ridge Mountains of Virginia, about 150 miles from the nation's capital. A hard-surfaced road leads up to the base of the mountain and runs past Briarsville, the first of the hollows. Extending progressively back into the mountains are the other communities: Rigby, Oakton, Needles, and Colvin. Although Colvin Hollow was only eight miles removed from the highway, it was effectively isolated from the outside world. The investigators had to go up hazardous trails on horseback, and then walk the rest of the way. When they finally reached their destination, they came upon a community that had seldom been visited by outsiders in the period of more than 100 years since the first Anglo-Saxons had come up to settle there. Although Herbert Hoover had a camp only ten miles away, the residents of Colvin Hollow had never heard of him. There were no social agencies of any kind in the community. No one could read or write. The English spoken was quaintly Elizabethan. There were scattered families of from five to eleven members living in mud-plastered one-room huts. For food they depended largely on the little maize and cabbage they grew in small patches. The nearest general store and telephone were at Oakton, five miles away, but these were utilized only very rarely. Without multiplying details, it may be said that the rest of Colvin Hollow was in keeping with this picture of a very rudimentary existence.

[34] Mandel Sherman and Thomas R. Henry, *Hollow Folk* (New York: Thomas Y. Crowell Company, 1933).

As one moves down from Colvin Hollow, the communities become increasingly modern. Needles, for example, has some farms. A few of the citizens are literate. There is a combined school and church in the community. Oakton, next down the line, has a general store with a telephone. Rigby has still more social development; and Briarsville, at the foot of the mountain, is a small farm and sawmill town. It boasts the usual social institutions of our culture: a fine school, church, stores. There are automobiles, radios, and a daily newspaper.

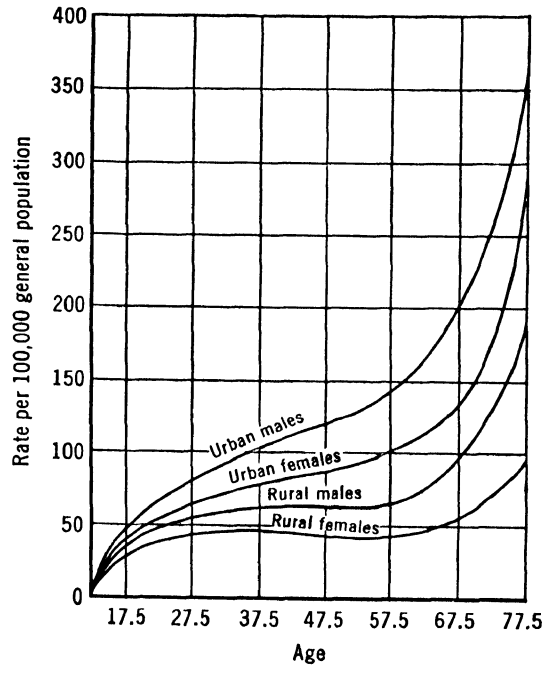
Here are five communities in a series of increasing cultural complexity. How do the inhabitants compare in stability of personality? The investigators discovered that evidences of neuroses increased as they moved from Colvin Hollow to the outside world. The Colvinites were practically without worries. The men did not have to be concerned about losing their jobs. The children had no ambitions which could be thwarted. When one youngster was asked what he wanted to be, he replied "I want to be what I am." The girls replied they were "goin to be 'wimmin.'" There was little discipline of the children, and there was little for the child to break or spoil. The investigators asked the children in the five Hollows what they would like to have. The only two wants expressed in Colvin Hollow were for chewing-tobacco and money, but the children had little idea of the value of the latter. The list of things desired (and not possessed) grew as the questioners moved out toward the periphery. And it is reported that the amount of mental stress also increased, although no data are given.

Incidence of Insanity

Does insanity increase as culture becomes more complex? The reader must be cautioned against concluding from the foregoing account of Colvin Hollow that all simple so-

cieties have good mental health, or at least better mental health than societies with a more complex culture. It is hazardous to compare modern and primitive cultures generally as to rates of insanity because of the great variation in social adjustment found in particular societies on the two cultural levels. A relatively simple culture is more likely to be integrated and consistent than is a more complex modern culture, but a simple integrated culture may place a heavy strain on man if it runs counter to his biological tendencies. It will be recalled that we have a picture of widespread marital unhappiness among the primitive Manus of New Guinea due in large part to their negative teachings on sex, which resemble those of some modern cultures; whereas the Trobrianders with their naturalistic attitudes toward the sexual function are reported to have conspicuously good marital adjustments. Competition leading to anxiety and insecurity is inimical to mental health, and our own society is cited as one in which competition is particularly pronounced. Yet there are highly competitive primitive societies, while in a modern civilization like that of India competition is more moderate, as it is also among the preliterate Hopi Indians. Allowing for variation, we may still note that literate cultures are in general more complex than preliterate ones; and increasing complexity probably means added strain, although civilization also brings solutions to many problems.

Because western society has become more complex and has brought added strain, many writers assume that the incidence of insanity has increased. Our urban civilization represents a relatively recent change from rural patterns that existed for several thousand years, whereas we have had our present urban civilization for less than two hundred years. Cultural changes are most pronounced in the cities, and the commitments to mental institutions from the urban areas exceeded those from rural regions, as indicated by



117 **Insanity Rates for Urban and Rural Males and Females**

The chances of becoming insane increase rapidly in the later years of life. The chart shows only admissions to hospitals, however, and hence does not show the true incidence of insanity, since many insane are not hospitalized. (From Carney Landis and James D. Page, *Modern Society and Mental Disease*, New York, Farrar and Rinehart, 1938, p. 45.)

Figure 117. But whether the conditions of city life are responsible or whether cities select unstable rural types as migrants is not clear. There is also the possibility of differential diagnosis, reporting, and commitment.

Underlying the differences between our modern urban industrial society and the earlier economies of the hunter and farmer are differences in group integration. In earlier times the small groups were organized chiefly by the family and the church in ways that gave the members a sense of security. Every individual was a part of a true community of relatives and followers of the faith. The point may be illustrated by reference to Australian tribesmen among whom

no social interaction was possible unless the individuals involved could first be placed in the kinship system, for this determined the appropriate patterns of response. Ethnologists who visited the area had first to be "adopted" by some family before they could enter into the social life. In modern times the influences of the large family system and the church have greatly diminished, and their places have been taken by industry and the state. These institutions give us a higher standard of living, more real income than the earlier economy provided, but we still have anxiety because the benefits are evenly distributed, with some having much and others little. This inequality makes possible invidious comparison with others, with resulting unhappiness. More important, the small and intimate nature of the earlier community gave to all a sense of belonging and participation, whereas now the large impersonal group causes many individuals to feel detached and apart. Civilization has become schizophrenic by encouraging exclusion and isolation instead of relatedness and cooperation.[35] When Durkheim,[36] in his celebrated study of suicide, inquired into the reasons why certain groups had higher rates than others, he was struck by the fact that the groups with low rates (rural, Catholic, etc.) were the groups with high degrees of integration and solidarity.

When, however, the data on mental disorders for the United States were carefully examined, the conclusion was reached that there has been no long-term increase during the last century in the rate of functional psychoses of persons under 50 years of age.[37] This conclusion is based on an examination of a time series of age-specific rates of first admissions to mental hospitals in Massachusetts, where facilities for the care of the mentally ill have long been relatively favorable. For the aged, an increase in mental disorders is reported, possibly due in part to a true increase in arteriosclerosis, and certainly due in major part to increased hospital facilities. The very limited facilities for the care of the mentally ill in the nineteenth century meant that patients had to have a relatively severe illness to be admitted.

The widespread belief that modern civilization with its individuation, insecurity, competitiveness, lags, and *anomie* is responsible for an increase in the incidence of pyschoses thus appears not substantiated by this evidence covering one century in an already advanced culture. This finding does not however preclude the possibility of a real increase in neuroses and psychoneuroses during the last century. Nor does it rule out the possibility of short-term changes in the rate of functional psychoses due to critical social changes like economic depressions and wars.

The parity of rates of functional psychoses in the nineteenth and twentieth centuries lends itself to various interpretations regarding causation. The data give some support to the theory of genetic and constitutional predispositions to mental disorders. The theory that functional psychoses arise from thwarting of basic human drives and traumas in early family experience is not invalidated, for the sources of such emotional disturbances may have remained more constant than the total social structure of adult life.

SOCIAL ORIENTATION TO DEVIATION

The rate of mental disorders, whether increasing or not, poses the serious problem of what can be done to ameliorate the situa-

[35] Kenneth E. Appel, "Science, Psychiatry, and Survival," *Science*, 108: 604, November 26, 1948.

[36] Émile Durkheim, *Suicide*, tr. by J. A. Spalding and G. Simpson (Glencoe, Ill.: The Free Press, 1951).

[37] Herbert Goldhamer and Andrew W. Marshall, *Psychosis and Civilization: Two Studies in the Frequency of Mental Disease* (Glencoe, Ill.: The Free Press, 1953).

tion. The attack on the problem is twofold, remedial and preventive.

The Remedial Approach

One approach is to have the individual who is suffering from a mental disorder treated by a psychiatrist, a physician, a man of religion, a teacher, or a sympathetic companion, depending upon the nature of the disorder and the availability of aid.[38] The route of cure is to develop in the patient more and more insight into his difficulties. Psychologists generally frown on any attempt to solve the problem simply by changing the individual's environment. They say that unless the person's conflicts are solved, he will carry them into the new situation, and the problem will reappear. It is more helpful, therefore, to explore the patient's inner life until he gets some insight into his difficulty; such insight is desirable regardless of what is done to change the individual's environment. To do this is much more difficult with psychotics than with neurotics.[39]

There is a way of solving an individual's conflict which does not involve an inner change at all. In certain cases satisfactory results are achieved simply by effecting a change in the individual's experience. The solution consists in putting the individual into a situation which is socially acceptable and which obviates the conflict. The new situation may be special in that it is unusual; but it is not abnormal because it is socially approved. Dollard[40] reports the case of a man who dreaded competition and who was maladjusted in our highly competitive society, but who found happiness when he entered a monastery.

The public attitude toward mental disorder often contains negative influences that hamper recovery. Unlike the general attitude toward physical disease, which is that those who become ill are unfortunate, the traditional attitude toward insanity in the United States and a number of other societies is one of shame, which causes the patient to feel "secondary guilt" and to blame himself for his illness, retarding his recovery. This sense of shame shows itself in the tendency to deny, if possible, the reality of the abnormal symptoms, in the effort to "normalize" the symptoms of mental disorder by providing reasons why a person might act in a markedly deviant manner without being mentally ill. This tendency toward normalization and denial has been observed even in families faced with mental illness of a member.[41]

The environment of treatment is significant for recovery. The attitude of shame in certain cultures may be reflected also in the type of care the disordered person receives, for if there is shame, efforts are more likely to be made to isolate the patient, as in a mental hospital, than if there is no feeling of shame. At least the Hutterites, to whom we have referred above as having below-average rates of mental and social deviation, do not feel that mental illness is disgraceful. They do not hospitalize their mentally sick members, except for brief periods for diagnosis and perhaps shock therapy, but care for them at home.

Recognizing the importance of the en-

[38] A study of tenement families in New York City found that these individuals go first to their friends in case of trouble, next to relatives, then to local druggist, then bartender, priest, labor leader, politician, clergyman, and policeman in this order. These are not, however, individuals with mental disorders. Earl L. Koos, *Families in Trouble* (New York: Kings Crown Press, 1946).

[39] The difference between a psychotic and a neurotic has been humorously stated as follows. A psychotic is one who believes that 2 plus 2 equals 5, whereas a neurotic knows 2 plus 2 equals 4, but worries about it.

[40] John Dollard, *Criteria for the Life History* (New Haven, Conn.: Yale University Press, 1935), pp. 282–284.

[41] John A. Clausen, "Social Science in the Mental Health Field," *Items* (Bulletin of the Social Science Research Council), Vol. 9, No. 4, December 1955

vironment of treatment, the sociology of the mental hospital has lately been accorded greater recognition by students of mental health.[42] Attention has been given both to the advantages of the mental hospital with its more protected environment and less taxing routine than is found in the outside community, and the disadvantages, like the isolation from normal family and community life. Because of status differences between patients and staff, and between staff members, it is often difficult to develop in the mental hospital the sense of community or belonging which may have therapeutic effects. Awareness of this problem has led to experiments which try to create in a hospital some of the usual identification with a community.[43] A further step toward the Hutterite model occurs when the mental hospital is abandoned and treatment is undertaken in a real, full-sized community organized for therapeutic purposes, as in the Amsterdam Municipal Health Services and other Dutch cities.

The Preventive Approach

While it is necessary to treat individuals who have mental disorders, there is increasing recognition of the fact that back of these disordered individuals are great cultural forces which help to induce the disorders. When there are so many persons with mental disorders in our society, the question arises of what can be done to reduce the number. To deal with individual patients may not be the most effective answer. We might achieve better results if we attacked the social situations responsible for mental disorders which, as we have seen, mainly cluster about (*a*) the methods of child-rearing and (*b*) the cultural conditions of adult life.

An environment conducive to mental health in early childhood involves two basic social orientations on the part of the young child. The one is the need of the child to feel secure in the group, a need which depends for its satisfaction primarily on the show of affection by members of his family. The other is the need of the group to feel secure about the child, which requires conformity on his part to the norms of the group.

The need for love, with understanding. The child's need for affection is sometimes obscured by excessive attention by parents to the techniques of child care. As recent researches suggest, more important than methods and times of infant feeding, toilet training, and the like is the quality of the interpersonal relationships between mother and child. Attention to techniques is probably more appropriate to the performance of impersonal tasks than to the cultivation of effective human relations. The crucial problem in the administration of affection is the proper dosage, avoiding too much or too little. Too much may lead to overprotection and sheltering, too rigid fixation on parent, and too much emotional stimulation. Too little induces insecurity or even a feeling of rejection, which may result in anti-social regression. The need for balance in love means that love is not enough,[44] but must be tempered with understanding of the child and by judicious discipline.

The child's impulses must be disciplined in the interests of social order, but this is not to be confused with the mere convenience of adults. If, instead, discipline is judged by its consequences to the personality of the child, then control which is moderate and even is generally to be preferred to discipline which swings from the extreme of severity

[42] Alfred H. Stanton and Morris S. Schwartz, *The Mental Hospital* (New York: Basic Books, Inc., 1954).

[43] Maxwell Jones and Associates, *The Therapeutic Community* (New York: Basic Books, Inc., 1953).

[44] Bruno Bettelheim, *Love Is Not Enough* (Glencoe, Ill.: The Free Press, 1950).

to that of laxity. Discipline without understanding is tyrannical and often leads to rebelliousness, especially if one parent is lenient and the other severe.

Controlling the conditions of adult life that lead to strain. To change the conditions of adult life that help to produce tensions is a big order. How, for instance, reduce war neuroses? The ideal is to eliminate war. But to expect to abolish war in the near future is probably less realistic than to rear our children to become warriors, which appears to be the course we are beginning to pursue. It does not seem possible, for reasons which will be detailed in Chapter 26, to reshape completely the social heritage; but it may be both possible and sufficient to deal with those segments of the culture that lead to strain. An example is the successful campaign against venereal disease which has reduced the rate of general paresis. With wartime prohibition, the rate of alcoholic psychoses began to decrease in 1918 and reached a low point in 1921, from which point it has risen to a new high. While our experience with legal prohibition was not such as to encourage further experimentation along this line, it does indicate the need for effective methods of controlling the consumption of alcohol.

Our views of culture are correlated with our attitudes toward deviants. It is instructive to observe that our attitude toward social deviants reflects the idea of culture that we hold.[45] If we view the existing culture as the best possible solution to our problems, or at least as the most practicable solution, then we may feel that the deviant is to blame for his maladjustment, and that he ought either to adjust himself to the existing order or be removed from the group. The deviant according to this viewpoint is a threat to the existing order which deserves to be preserved because it is the best possible social order. This is essentially the position taken by Sumner who viewed the folkways as the products of a struggle for survival among various possible solutions to life problems. The solutions that win out are held to be best adapted to the existing circumstances. Since circumstances vary from place to place, the folkways also vary. This view of culture naturally emphasizes the necessity for conformity on the part of the individual, and perhaps explains Sumner's conservatism in matters economic and political.

But there are those who take a different view of culture. There may be, as Sumner held, a strain toward order and consistency in the folkways, but how are we to determine whether a given cultural trait represents "the best possible adjustment under the circumstances"? A distinction may be drawn between adjustments involving uses of technological traits and other adjustments involving ideologies. As a rule the tools and techniques of a people are developed as fully as the state of knowledge and the available natural resources permit. It is very difficult for an outsider to improve on, say, the Eskimo shoe or the Hopi method of planting corn, provided that no suggestions or materials be brought in from outside. But can we say that the religion or the sex and family organization of a people represents an equally satisfactory adjustment? The test is not as definite as in the case of technology. But if we find that the sex code of a culture is associated with strained marital relations between husbands and wives, as is true in many cultures, does this represent the best possible adjustment? Perhaps a repressive sex code, by diverting energy from sexual into economic channels, aids in the struggle for survival in which case what would represent a favorable adjustment

[45] Morris E. Opler, "Theories of Culture and the Deviant," in *An Educational Philosophy for Exceptional Children* (Proceedings of the Spring Conference on Education and the Exceptional Child of the Child Research Clinic of the Woods Schools, May 1947), pp. 8–14.

along one line would constitute an unfavorable adjustment along another. For one reason or another the adjustment in nonmaterial culture is often not so conspicuously good as it is in technology. This is true even in relatively stationary societies of the kind which Sumner described. Had Sumner not been concerned with primitive cultures where changes come slowly, but with modern cultures characterized by rapid changes, he would not have been so greatly impressed by the high degree of adaptability of culture to the needs of man.

If we follow not Sumner but Horney in the view that culture may be maladapted to the needs of man, then our attitude toward the deviant changes. We regard him as a victim of unreasonable and inconsistent demands, and our attitude is one of sympathy not censure. We are not so much disposed to cast him out of the group as to help him. Even more, in the interests of prevention, we recognize the need for social reform and social planning. If, as Horney indicates, anxiety is generated in individuals by an economic order that overplays competition, then mental health can be improved by setting brakes on competition, as in minimum wages, unemployment compensation, collective bargaining, and old age pensions. Whatever increases economic security, decreases emotional insecurity and promotes mental health. If, as is often charged, the modern factory gives the worker no sense of participating in a creative process but instead segmentalizes and routinizes his experience, then the problem is how to reorganize the industrial process so as to make it satisfying to the worker. If the modern city with its accent on anonymity leaves many persons with a feeling of intense loneliness, then clubs and other organizations are needed which help to bring congenial strangers together and supply the intimacy and sense of belonging normally found in small groups. These examples — only a few out of many that might be cited — illustrate the point that much could be done to reduce the incidence of maladjustment in our society by setting our cultural house in order.[46] Mental hygiene is a cultural as well as a psychological problem. In Chapter 26 detailed attention will be given to the problems involved in adjusting culture to man, as well as man to culture.

SUMMARY

The first two chapters of this section were devoted to considering separately the roles of group interaction and culture in the development of normal personality. The present chapter is concerned with deviant types, that is, persons who characteristically and significantly deviate from the norms of the society. Social deviants represent failures in the process of socialization, since they have not satisfactorily interiorized certain norms of the group.

The sociologist, while principally concerned with the group and cultural factors in personality, cannot ignore the constitutional and natural environmental factors, since all four factors are interrelated.

Where no organic basis is discernible, mental disorders are called functional. In the development of these functional mental stresses, there are two general factors.

The first is the predisposing cause that lies in the genes which are inherited. These genes unfold and develop into our biological traits with some assistance from environment during the period before full maturation. Thus the correlation of schizophrenia in identical twins is much greater than in non-identical ones.

The second general factor is environmental stress, mainly at two levels: (*a*) infancy and early childhood, and (*b*) adulthood or near-adulthood.

[46] L. K. Frank, *Society as the Patient* (New Brunswick, N.J.: Rutgers University Press, 1948).

As to the influence of infancy and early childhood, the psychoanalysts, who have admittedly contributed much to psychiatry, so often trace the origins of neurosis back to early childhood that they are credited with saying the possibility of a neurosis is determined by the time one is five years old. It may be said that these influences of early childhood are largely due to the group, generally the family, whose influences have so much to do with affection and its frustration, with feelings of inferiority, the development of the ego, and the conception of self. These group influences may be more accentuated in one culture than in another; but they also may be found presumably in hunting bands, in the pastoral life, in the farm, and in the city, just as jealousy sometimes may be found in widely differing cultures.

Later come the influences that bear upon the adult or near-adult. These are the emotional crises of life, the conflicts between wishes and standards, the frustrations imposed by moral codes, wartime discipline, competitive struggles, emotional shocks, etc. If a child has had a wise upbringing in infancy and childhood, he may withstand most or all crises of adult life without ill effect, although signs of strain are likely to appear in intense crises even among those with the most sturdy childhood.

Thus mental disorders appear to be largely the result of group influences in early childhood and of cultural stresses during adulthood. Both group and cultural stresses upon the individual vary in kind and intensity in different cultures, and are related to phenomena of the integration of society, and the adjustment of inherited nature to the group and culture.

QUESTIONS FOR DISCUSSION

1. Where does society draw the line between eccentricities that are tolerated and those that are not?
2. What is the difference between a cultural norm and a statistical norm?
3. What are the components of the process of socialization?
4. How would you account for the relative absence of mental disorders among children under ten years of age?
5. Why is the study of personality disorganization important to sociology as well as to psychology?
6. What aspects of college life, if any, are not conducive to good mental health? What aspects are favorable?
7. Why are studies of mental disorders among identical twins of special interest to sociologists? What do such studies show about hereditary and environmental factors?
8. Are mental disorders on the increase? What difficulties lie in the way of answering this question?
9. Why is the rate of mental disorders lower in rural than in urban communities?
10. What biological and cultural hypotheses can be advanced to account for the low incidence of schizophrenia among the Hutterites?
11. What is the relation of rapid social change, such as characterizes modern life, to mental health? Why?
12. What kinds of social situations are unfavorable to mental health?
13. How is the environment of treatment important for recovery?

TOPICS FOR REPORTS

1. Social class and psychiatric disorders.
2. Robert Straus and Sheldon D. Bacon, *Drinking in College*. (New Haven: Yale University Press, 1953).
3. The ecology of mental disorders.
4. The group approach in the treatment of mental disorders.

5. The experience of adolescent girls in Samoa. (See Margaret Mead, *Coming of Age in Samoa.*)
6. The trend of mental disorders.
7. The social structure of a mental hospital.
8. Mental disorders in wartime.

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A socio-psychiatric study of the total institutional context of the disturbed-women's ward of a mental hospital. The effect on patients of the relationships of staff members, the interrelationships of patients, and the unscheduled as well as the scheduled activity.

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This book, more than most others on personality deviation, considers the problem from the sociological perspective.

Part Five:

Human Ecology and Population

In a preceding section, various group patterns and processes were discussed, together with their significance for human experience. No treatment was accorded, however, an important type of human group: the locality group, or community. A community may be thought of as the total organization of social life within a limited area. Human social life is characteristically carried on in such communities. They are the loci of group activity, of institutional organization, and of the development of human personality.

The present section considers this important factor of community from the standpoints of settlement and population. What determines the location of human communities, their size and their physical pattern? Chapter 13 undertakes to answer these questions, tracing the changes in the nature of human communities attendant upon the growth of culture, and raising the interesting question of the adequacy of man's adjustment to his urban environment. Chapter 14, "The Distribution of Population," considers the distribution of population at the present time by continents and races, together with the recent changes in these respects and the principal reasons therefor. The elements of size and composition of population are so important in their social consequences that Chapter 15, "The Growth of Population," considers, in detail, the factors of migration, births, and deaths, by which populations change. The social significance of the declining birth rate and the changing composition of the population receive special attention.

13

Communities

When Romeo was banished from his community, Verona, for killing Malvolio, the punishment seemed worse than hanging — though if Juliet had not lived there the punishment, no doubt, would have appeared less severe. Yet not to be permitted to live in the same place with one's family, friends, playmates, and business associates and to be deprived of one's religious communion and of visiting with neighbors made life seem hardly worth living. This closeness of ties to one's community may be difficult to understand today, when the community of college and university may seem preferable to that of the old home place, and when a family may move with ease from one community to another. A lad today of Romeo's age may find life in Main Street boring or oppressive and be glad to exchange it for the Bohemia of the big city.

Communities have changed since the days of Renaissance Italy and will change more in the future, bringing opportunities of improvement. These changes may also bring problems of overcrowding, of crime, of immorality.

Today, then, there are all sorts of communities, and we may have our choice. There are thinly settled rural communities and densely packed cities. There are villages and satellite towns. They differ not only in size but also in other characteristics. Some are industrial communities, clustering around factories. Others are agricultural trading centers. There are college towns and pleasure resorts. Then there are the great metropolitan areas that seem to have everything — but quiet.

But linking all these many kinds of communities are the automobile and airplane, the telephone and radio, which encourage our interests far beyond the community confines and weaken the neighborhood feeling which was so strong in ancient Verona, the home of the Capulets and the Montagues.

COMMUNITY AND ECOLOGY

Community

A community is the total organized life of a group inhabiting a locality. We cannot discuss satisfactorily how communities change or the different kinds of modern communities unless we know what a community is. A community is a group or a collection of groups that inhabits a locality. The residential tie to an area is one attribute that distinguishes a community from other groups. Another distinguishing feature of a community is the total organization of social life in the area. Thus the American Sociological Society is a group, while Butler, Georgia, is a community.

The origin of the word community goes back to a time when inhabited places were small, consisting of a very few families. Hence the group of families living at a place comprised the only group there. The term continued to be applied to places as they grew larger, as, for instance, towns and cities, which contained many different groups, one of which might be, for example,

a school. The school would not be a community, even though it may be identified with a locality, for the school children do not live on the school grounds. If they do, and their needs are largely met there, as in the case of students at Oxford University, then the school can be called a community. Thus there may be communities within communities.

The term community has been applied to very large areas indeed. The United Nations comprise an international community. We even have the expression world community. Since the area in this case is the whole planet, the distinguishing emphasis is the communal nature of this world organization. Communal implies common interest sufficient to commune or talk intimately together. For the nations of the world to have common interests enough to talk about them in a friendly manner is a thought attractive to those who ardently wish the nations of the world to live together without war. Hence in a community of nations the emphasis is on harmony or common interests. Indeed this emphasis is made so strong by some that the concept of area appears to have been dropped out altogether. With this emphasis, the term community is sometimes applied to a whole region, state, or nation. This commonness of interest was implicit in a community of a few families and did not need to be emphasized as much as locality. There were sometimes rivalries or family feuds that split a community; but fighting within a community was generally not allowed to go so far as to be disruptive. Cooperation within a community was helpful to survival in those days when struggle for existence was intense.

Human Ecology

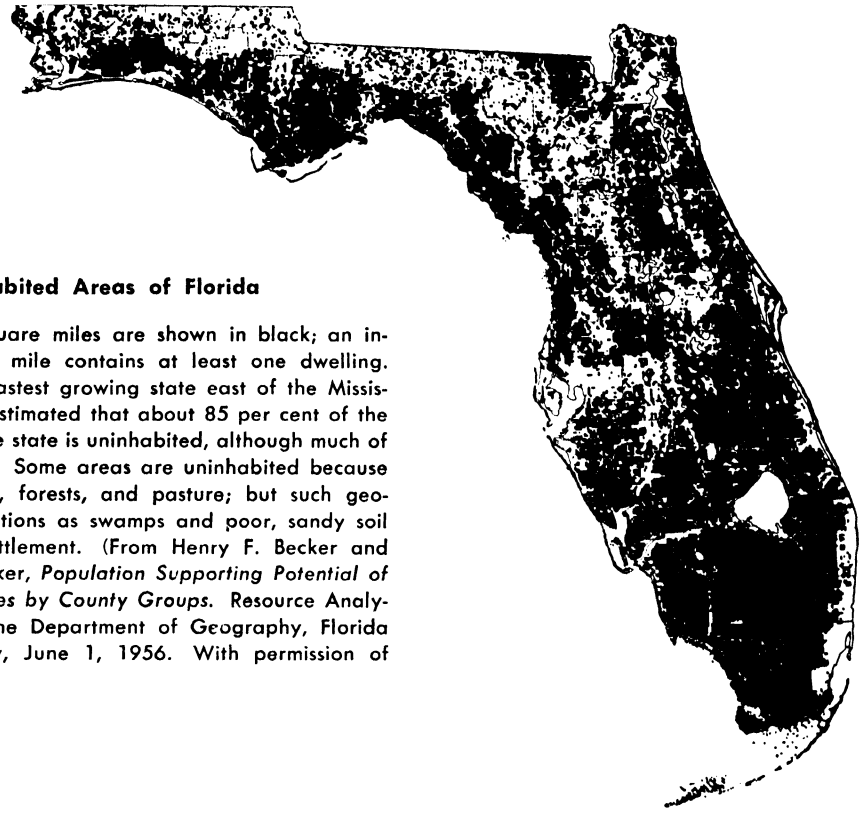
The study of the social life of a community is much like the study of sociology. Communities are of interest to sociologists because of their social life. The young men and women of a community marry and form families. Thus there is the study of family organization which is a branch of sociology and may be studied without reference to any particular community. The inhabitants of a community also work to produce the goods they need or which they exchange through the medium of money for a variety of other goods. This is economic activity. The people of a community belong to religious organizations. In a local community there are public opinion, moral and immoral behavior, learning from others, conflict and crime.

These kinds of organization and these types of social behavior suggest the usual chapter headings in sociology textbooks. In other words, the social life of a community represents in miniature the social life in general with which sociology deals. So in this chapter on communities we do not deal with family, religion, government, or with social control, the learning process, folkways. These are dealt with in other chapters of the book. In community studies such as those of Middletown and Plainville,[1] for instance, there is often a better opportunity for seeing the interrelations of institutions and associations than in general treatises on these topics. We have, however, tried to point up these interrelations elsewhere in this book. The approach here is from the point of view of ecology.

Ecology is the study of groups in relation to their environment. Communities are groups inhabiting a locality, with a specific natural environment, of fertile lands or navigable waterways with varying degrees of precipitation and temperature. Hence communities are readily studied ecologically.

Ecology is a branch of biology and has

[1] Robert and Helen Lynd, *Middletown* and *Middletown in Transition* (New York: Harcourt, Brace & Co., Inc., 1929, 1937); James West, *Plainville, U.S.A.* (New York: Columbia University Press, 1945).



118 Uninhabited Areas of Florida

Uninhabited square miles are shown in black; an inhabited square mile contains at least one dwelling. Florida is the fastest growing state east of the Mississippi, yet it is estimated that about 85 per cent of the total area of the state is uninhabited, although much of it is productive. Some areas are uninhabited because of lakes, parks, forests, and pasture; but such geographical conditions as swamps and poor, sandy soil set limits to settlement. (From Henry F. Becker and Harry F. Brubaker, *Population Supporting Potential of Florida Resources by County Groups.* Resource Analysis Center of the Department of Geography, Florida State University, June 1, 1956. With permission of the authors.)

been largely concerned with the habitats of the lower animals and plants. Some of these studies are very interesting, as, for instance, the building habits of the beaver, the hibernation of the cold-blooded reptiles, the seacoast shell life that must adjust to the pounding surf, and the social organization of the bees. The polar bear can live only in cold climates, and the hippopotamus in hot, which makes a problem for the zoos, and a difficulty too great for circuses. The picturesqueness of ecology has been caught in Walt Disney's wild-life films.

The human animal, the subject of human ecology, is less restricted by his physical environment. Communities of human beings have been found by explorers wherever they have ventured except in a few such places as the top of Mount Everest or among the queer fish at the bottom of the ocean. The reason man can live almost anywhere on the planet is the culture he possesses, which enables him to wear clothing, to construct houses, to build fires, and to spray with D.D.T. A study of human ecology should take us into the study of culture, but that would be the tail wagging the dog.

However, natural environment does set limits to human habitations, supplies the food and other objects of material culture which may be supplemented by trade through the inventions of transportation. Communities at the junction of river and sea are larger than those on the sides of mountains. The population of South America is most concentrated around the coastal rim of that continent. The sizes and spatial distribution of communities are in part a function of natural environment; and the size of communities and the spacing of the inhabitants therein have much to do with human happiness and welfare.

Hunters may work far away from their residences. In most communities of historical times, people reside and work in the same locality. But some hunters work

away from where they live, for hunting expeditions either of single persons or of small groups take the men away from their residences, sometimes more than a day at a time. Thus the area of part of their work is much larger than the area of their homes. The food supply comes from a distance away from the community.

Primitive Communities

Hunters and food-gatherers live in small and unstable communities. There are many different kinds of hunting. Some peoples hunt small game like rabbits with a throwing stick. Others kill birds with a blowgun. Bigger animals like the wild pig require more territory to roam. The caribou are found in large groups, as are the bison in grassland areas on the edges of forests. But they move great distances with the seasons.

Many peoples live less on animal food than on the products of plants such as berries, fruits, nuts, and roots.

The abundance of these sources of wild food varies, permitting larger or small aggregations of people in a region or large area. However, in no case are they sufficiently abundant to permit in any particular locality a large community. These communities vary in size usually from ten persons to three or four hundred. The size of a community depends not only on the supply of animals but also on the stage of technological development of such things as traps and hunting weapons.

A point of interest is how long a group of people will live in one locality. Sometimes the immediate locality of a community will be continued only a few years, if the area is depleted of animals or if the route of migrating herds changes. On the other hand, the route of migrating salmon does not change, and a community at a waterfall may be large and permanent. Often a hunting people will live in one locality in the summer and in another in the winter. In such cases of unstable localities the word community may not be applicable. Sometimes they are called a "band" of hunters and their families.

Pastoral peoples often wander with their flocks. Domesticated animals insure a more continuous food supply than do wild ones. Hence a region where the inhabitants live largely on their herds is somewhat more populous than a region of hunters; but their communities are still small, because a large territory is needed to graze the animals possessed by the community. If the land is semi-arid or far north or the food for animals is scarce, herds range far, and the families of the herders move about over considerable distances, as is the case with the Lapps, where a community may consist of one large family with relatives, shifting back and forth from a summer locality to a winter one.

Pastoral peoples are not always mobile, however. The cattle may be driven out to pasture and back from fixed dairies and barns, as in the case of the Todas of India. The cattlemen of the western United States live in fixed abodes.

Thus the assurance of a more stable food supply with the domestication of animals does not always eliminate the wandering of bands and families nor increase the size of community.

Agriculture brings a more stable community. The word community may have originated with the coming of agriculture. The cultivation of plants permitted a group to live a long time in one locality. Furthermore, a larger and more stable food supply meant larger communities. Agriculture was first quite crude. Only a digging stick of wood was used to plant seeds or roots. Hence the area cultivated was small and generally not far removed from place of residence. There was also some hunting. The sizes of the early agricultural communities were measured in the hundreds of inhabitants per village.

The combination of domesticated plants and domesticated animals such as fowl, pigs, sheep, llama, goats, as well as cows, brought increased food and increased size of communities. In time the tools of agriculture were improved; and the plow, at first not much more than a wooden hoe dragged along, was added. The improved plow pulled with oxen meant more land cultivated and hence more food. The sizes of these communities were measured in the thousands.

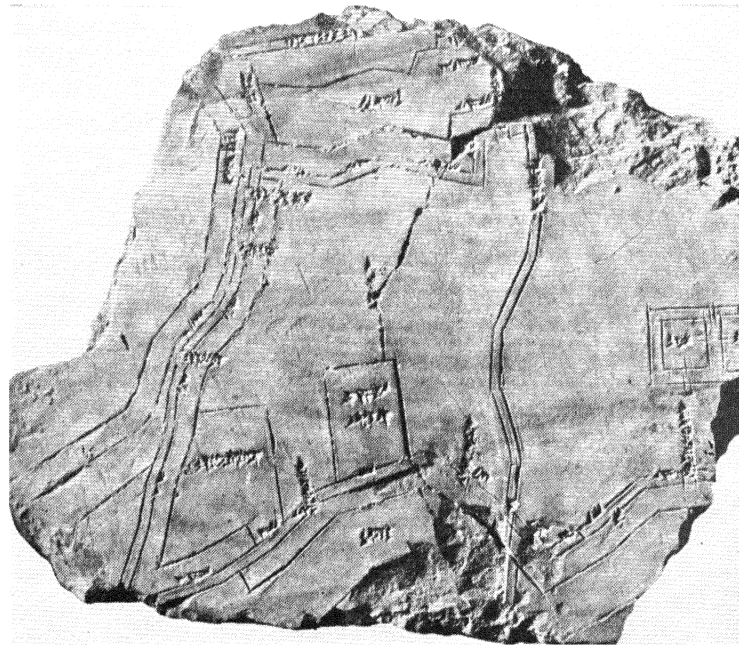
With agricultural villages came division of labor and more social organization. The early farmer was a jack of all trades, and he and his family could do almost any task around the farm and household that needed to be done. But in time specialists developed in healing, in delivering babies, in basket-making, in weaving, in tooth-pulling, in barbering, in carpentry. Such services were exchanged for other services or for food, or there was reciprocation without monetary exchange. There also developed some specialization in cultivated crops which led in turn to some exchange, although in general a farmer raised pretty much all that his family ate, and made much that they used.

And so communities grew into villages a long time ago with some special social organization. Later they grew into towns and cities.

Towns and Cities

Larger communities grew on crossroads and waterways. Services and goods were exchanged not only within villages but between them. The exchange of goods such as baskets or cloth or grain or pottery enables a community to get its supplies from longer distances over a larger area and also to profit from specialization of skills and crops. Such advantages could not have been realized without the development of technology such as making of pottery and pans, metal-working and weaving, as well as the plow and oxen. This combination of advantages expanded villages into towns and cities, with populations measured in tens of thousands.

Technology and trade account for towns and cities. Many of their inhabitants do not raise enough food to keep them alive. To get the food they must trade for it goods and services they produce with tools. The food is brought in from a distance. In the days of



119 Plan of Nippur

This is the oldest known map of a city (Nippur in Sumeria between the Tigris and Euphrates). Inscribed on a clay tablet now in the possession of the University of Pennsylvania, it shows several of the more important temples and buildings, its "Central Park," its rivers and canals, and its walls and gates. The three essentials for a city are manufacturing, trade, and a source of food. Fortresses, religious centers, and seats of government, all resembling cities, existed in early times without manufacturing and sometimes without trade. (Photograph from The University Museum of the University of Pennsylvania.)

the earliest cities, the easiest method of travel was in boats, the next best method by pack animals. Hence towns and cities were located at crossroads and on waterways, usually in or near fertile lands, such as the valleys of the Nile, the Euphrates, the Yangtze, and the Indus. Favorable as these valleys were to the growth of cities, they were inhabited for thousands of years before mechanical invention and social organization reached a point where cities were possible.

To these populous communities of 10,000 inhabitants and more, traders from a distance brought new ideas and methods which stimulated the progress of these towns and cities still further and widened the gap between the city man and his country cousin, for the rural peasants did not have the enlightenment of the city people.

Not all cities were the result of trade and manufacture. Many early cities were built around temples and governmental palaces. Gods and kings supported the people instead of industry and commerce. Taxes and tithes bought the food that was not raised by the inhabitants. Such cities were later the location of armed troops, also fed from taxes or tribute.

THE URBANIZATION OF THE WORLD

Modern Cities

Technology in transportation, in manufacture, and on farms makes large cities. As boats evolved into ships, and paths into roads, and as the tools of hand manufacture proliferated and became more efficient, towns grew into cities with populations measured in the hundreds of thousands. London in 1700 had about 700,000 inhabitants, but in 1300 only about 35,000. Places of 10,000 and 15,000 in the late Middle Ages were called cities, such as York and Frankfurt. At the time of Cortez, Mexico City was reported as having 60,000 houses.[2] Cities could not have grown to such sizes, however, unless food could be supplied them. Such a supply was possible only through greater productivity per farm laborer, which in turn was possible through fertilizers, two or three crops per year, rotation of crops, better plows, stronger draft animals, and selected seeds. Before these agricultural improvements, farmers could hardly produce enough food for their families. Afterward they produced enough to feed the cities as well as themselves. The size of cities was also limited by the water supply, fire hazards, the disposal of sewage, and the contagion that comes from density.

Mechanical power brought the age of cities. It was the steam engine that sprinkled the land with cities. This it did by putting steam locomotives on railroads and by applying steam power instead of muscle to tools, which became very large, requiring factories to house them. These uses called for the replacing of wood with steel and iron. Cities were no longer restricted to the seaboard, for railroads filled the interior with them. In addition to New York, Boston, New Orleans, and San Francisco, located on waterways, there are Denver, Minneapolis, Indianapolis, Cincinnati, Atlanta, and Dallas. The sea powers, notably Britain, could be challenged by the land powers, especially Germany.

Steam and steel not only multiplied cities, but they magnified them in size, so that their populations are measured in the millions.

The Metropolitan Community

The internal combustion engine ushered in the metropolitan community.

[2] W. S. and E. S. Woytinsky, *World Population and Production* (New York: The Twentieth Century Fund, 1953), p. 112.

The size of a city is limited by its area. By placing houses and factories close together, a lot of people can be packed into a small area, especially if buildings can be made tall, which they can be with structural steel supplemented with vertical transportation called elevators in the United States and lifts in other countries. But if the citizens get about largely by walking, the area of a city cannot be increased if there is only one trading and work center; there must be several such centers somewhat separated, as is the case in some oriental cities.

Larger areas are possible if improved local transportation is substituted for walking. The electric street car was such an improvement; but the bus and the private automobile were a much greater improvement, as was the diesel-driven railroad train. With a larger area, the population of the locality increases. The population may become so large that a new name is given to the locality: a metropolis.

The size of a city is determined not only by its area and population but also by its political organization. A large community is not just an aggregation of people; it is also a social organization. The over-all social organization is its government, which collects taxes from its citizens and whose officials are elected by them. The city's political boundary line sets off its citizens from outsiders and enables one to determine who pays taxes and who votes.

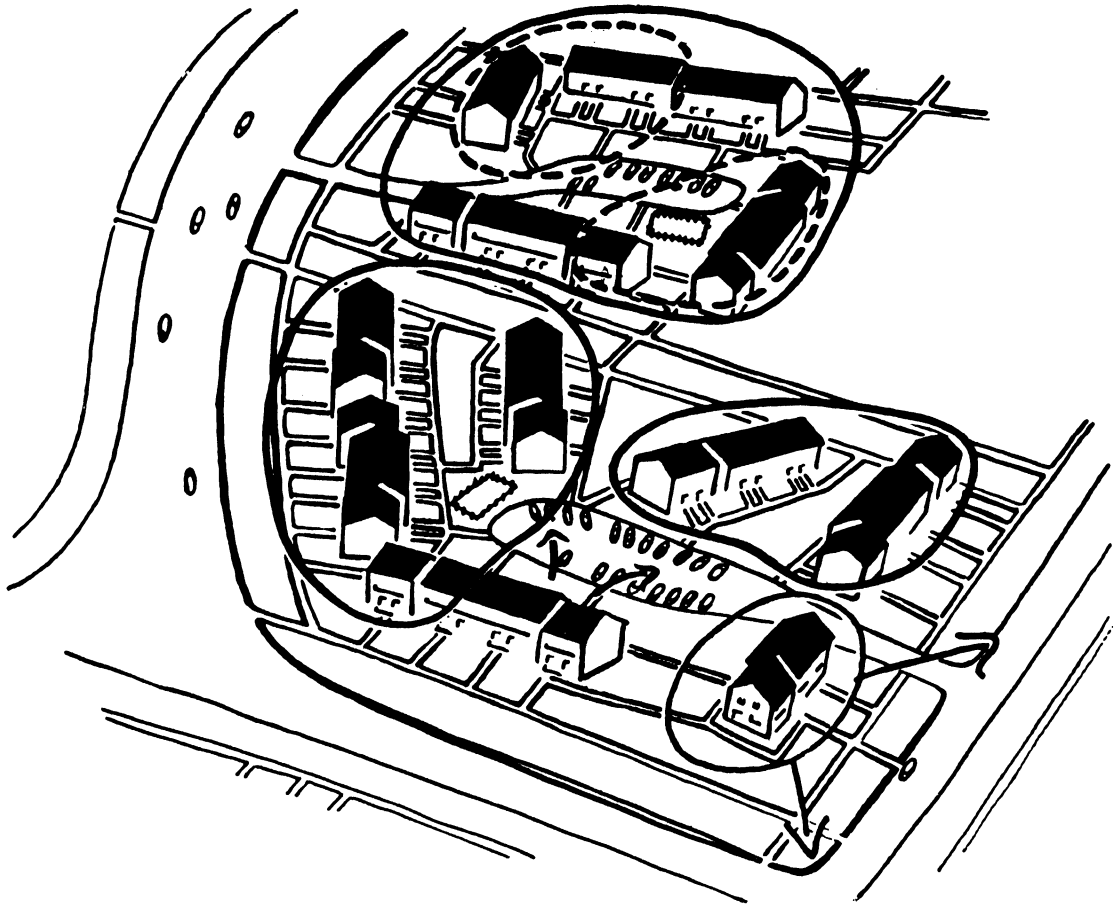
The boundaries of political cities were once walls, which stopped (sometimes) the attacks of enemies and at whose gates customs were collected. Now the boundary line is more easily passed. Many of the advantages of a large city, such as jobs or recreations or libraries, can be used by nonresidents who by living outside are deprived of voting for the mayor and of paying high taxes. So citizens of a city move out to suburbs, where the air is fresher, and are taken to their place of work in a vehicle propelled by an engine using gasoline or oil.

People move and get new jobs more quickly than cities change their political boundary lines, on the principle of the cultural lag.[3] For since the coming of the automobile, it is rather difficult to draw a political boundary line which will include the residences of all those who work in the metropolis, because some live very far out along transportation highways and railroads. But whatever the reasons why the change in boundary lines is slow, many people live in one political community and work in another. The separation between place of work and place of residence is becoming greater, and thus the conception of community is changed. In the United States in 1954, 14 per cent of the labor force worked in a county different from the one in which they lived. We do not have similar data for cities; but in New York City, 2 out of 5 worked in another borough from the one of their residence.[4]

Political cities and suburbs constitute an economic city. The people who work in a city and live elsewhere are generally said to live in suburbs. Some of these suburbs have been picturesquely called bedroom cities. If they were bedroom cities, they would be mere aggregations of sleepers like a hotel, rather than a community. Families, especially those with children, need the various social services which characterize the larger communities, particularly schools, churches, a library, a post office, stores, and places of amusement. Unemployed wives and children are dependent on local community life. Hence the families of commuters to big cities do not live in a string of dwellings along a highway but rather in near circular community areas with the social services near the center. The configuration is

[3] Cultural lag is discussed in Chapter 25.

[4] U.S. Bureau of the Census, *Current Population Reports: Population Characteristics,* Series P–20, No. 60, August 17, 1955.

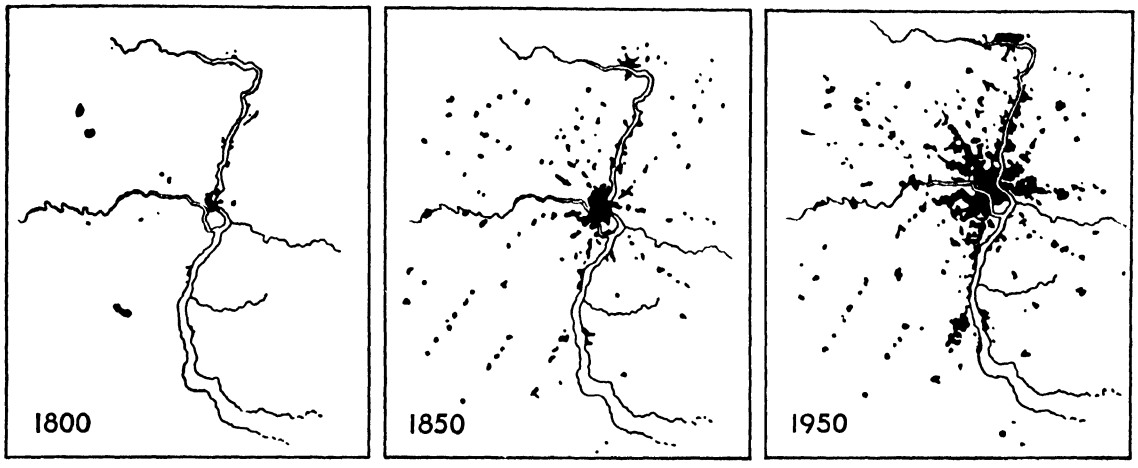


120 How Residential Location Affects Social Life

Shown above are rental courts in new suburbia such as Park Forest, Illinois, where social life is greatly influenced by the physical layout. Individuals tend to become friendly with neighbors whose driveways adjoin theirs. Social life is oriented inward around parking bays. For example, in the large court at the bottom, those whose back doors face each other form social units. The lonely apartment unit at the lower right isolates the occupants. The dotted lines at the top mark off sub-groupings within the larger unit. (Drawing by Miné Okubo. Courtesy of Fortune Magazine, © Time Inc.)

like that of beads of various sizes strung at unequal distances along a string. Those communities close to the boundary line of the metropolis are nearly always called suburbs. They are sometimes close together. Those communities of which a substantial portion of the working population have jobs in the metropolis and which are further away along the railroad tracks are sometimes called satellite towns. Their area is much smaller than that of a big central city. The inhabitants use both the automobile and the suburban train or bus to go to work in the city.

The central metropolis with its nearby suburbs and satellite towns plus scattered villages and hamlets and a few truck or dairy farms make up what is called a metropolitan area and in an economic sense they constitute a large city. Such an area might be



121 Urban Patterns and Local Transportation

In 1800 the shape of Philadelphia was like an oyster shell. With the coming of the railroads in 1850, small communities (different from commuting areas) grew up along their lines near the central city. The automobile, in conjunction with the commuter train, changed the pattern to that of a starfish with shattered prongs. Boston today is shaped like an octopus; and Los Angeles, the only large city developed since the automobile — which can move in any direction — is much less patterned.

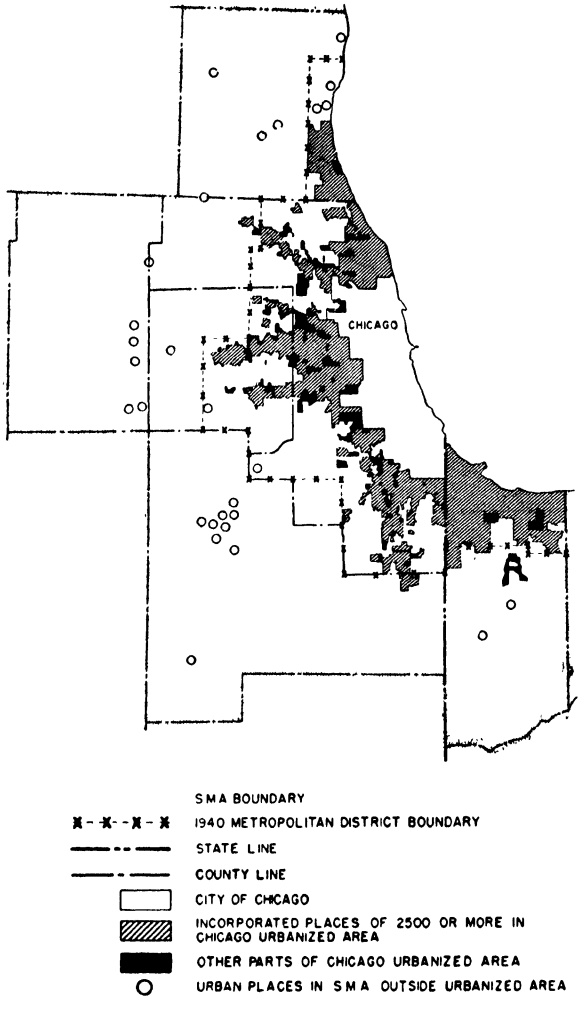
called a city if it had a single government and one great boundary line, although the inhabitants would be scattered over a rather large territory.

In the United States in 1950, every city with 50,000 population, plus the nearby surrounding population, was called a metropolitan area.[5] There were 168 of these. The smallest was the metropolitan area of Laredo, Texas, with 56,000 inhabitants; and the largest that of New York City with a population of 13,000,000. The percentages of the population of these metropolitan areas living in the central city itself varied from 22 per cent to 93 per cent.

If the boundary line of a metropolitan area included nearly all the people who worked in the central city, it would probably be somewhat circular and include a great territory. A more appropriate boundary would probably be somewhat like the outline of a starfish, for there are several highways and railroads going into the center of the central city.

The metropolitan area is a trading area as well as working and residential area. Larger communities exist because they are market places, as truly as because they are places for the fabrication of goods. And to trade in a community, traders have come from a distance, some from a long distance. With the growth of population and of wealth, trade has increased. The steam engine and the internal combustion engine have brought many more traders from long distances. The citizen of the small community does not do all his trading in the community in which he lives. He will usually buy his groceries, drugs, soap, and the other articles which must be purchased frequently from local tradesmen; but for more expensive articles, purchased infrequently, such as an overcoat, a pair of skis, or a jeweled wristwatch, he is likely to go to a large city.

[5] For a more precise definition of the standard metropolitan area, consult the U.S. Census of 1950.



122 Map of Chicago Land

The map shows inhabited areas and political and demographic boundaries. The city of Chicago, proper, that is, the city with political boundaries, is the elongated white area in the center, bordering Lake Michigan. The shaded sections are contiguous populated areas, called by the U.S. Bureau of the Census the "fringe areas" adjoining the city. These shaded areas are part of what is popularly called suburbs. Some of this fringe population live thirty miles from the center of the downtown shopping area. The circles represent populated places beyond the fringe. Some of these are called suburbs, too. They are also popularly called "satellite towns," but there are other such satellite places farther out. Other symbols mark the boundary of the Standard Metropolitan Area, an operational concept of the U.S. Bureau of the Census. Various lines represent city, county, and state boundaries, political units determined at an earlier time which do not conform to modern population distribution. (Map by Chicago Plan Commission.)

Thus the place of trade, like the place of work, is moving for some articles further away from the place of residence. A person may live in one community, work in another, and do some trading in still another.

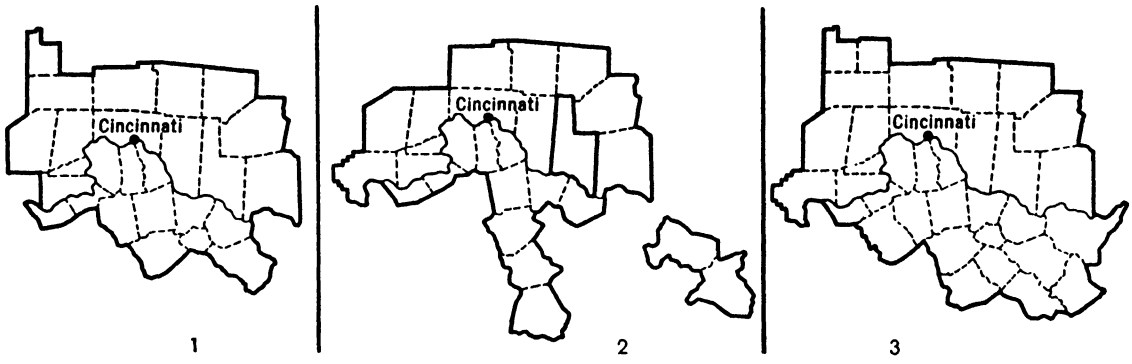
The trading area of a metropolis is more extended than is the residence area of those who work there. Thus some consumers will travel from 50 to 200 miles or more to make purchases, though the costs of transportation are a deterrent, unless the trips are very rare. The metropolitan area is based somewhat on the trading area; but the boundary lines are not the same, for a good deal of trading in a metropolitan area is done by purchasers living outside the area. Marshall Field's department store in Chicago has charge accounts for people living in all parts of the United States.

However, limits of trading areas around large cities are known for practical purposes by merchants, advertisers, and newspapers. Thus a line may be drawn between Knoxville and Nashville on one side of which the main flow of purchases of many goods is toward Knoxville and on the other side toward Nashville.

Thus separation of places of residence, of work, and of trade has changed the concept of community.

COMMUNITY CHARACTERISTICS

Though there are large metropolitan communities, we also have very little communities, too — some not much larger than those of the hunting and food-gathering cultures. And there are communities of all



123 **Trade and Service Area Dominated by Cincinnati**

1. Area by counties listening regularly to three or more Cincinnati radio stations in 1942.
2. Area by counties in which Cincinnati daily newspaper circulation in 1944–45 was 20 or more copies per 100 occupied dwelling units.
3. Area by counties in which 15 per cent or more of the "buying families" had active charge accounts at a leading Cincinnati department store in 1945.

The delimitation of the area dominated by the central city depends on the criteria used, and varies for different types of trade, etc. The economic city is often much bigger than the political city, creating problems of organization. The vast functional area dominated by Cincinnati covers eight counties in Ohio, six in Indiana, and twelve in Kentucky. (From *The Economy of the Cincinnati Metropolitan Area,* City Planning Commission of Cincinnati, December 1946, p. 108.)

sizes in between, as shown in Table 11. Communities classified by size make a continuum sometimes loosely called the rural–urban continuum. Various points along this continuum today are labeled hamlets, villages, small towns, large towns, cities, big cities, metropolises. There are no common definitions of these communities in terms of number of residents. But life in a small village is quite different from that in a big city. Also life in a small village is different now from what it was in a small village 3,000 years ago.

Characteristics According to Size

Our daily lives are affected by many other influences than the size of place we live in. Size of community is not everything. For instance, from a group of towns of exactly 5,000 inhabitants, one may be industrial with most of its working population employed in a textile factory; another may be an agricultural town, because it depends largely on trade with the surrounding farmers; another may be a college town; still another, a health resort. So also there are different types of cities, a pleasure resort

Table 11 · Numbers of Communities by Population, U.S., 1950*

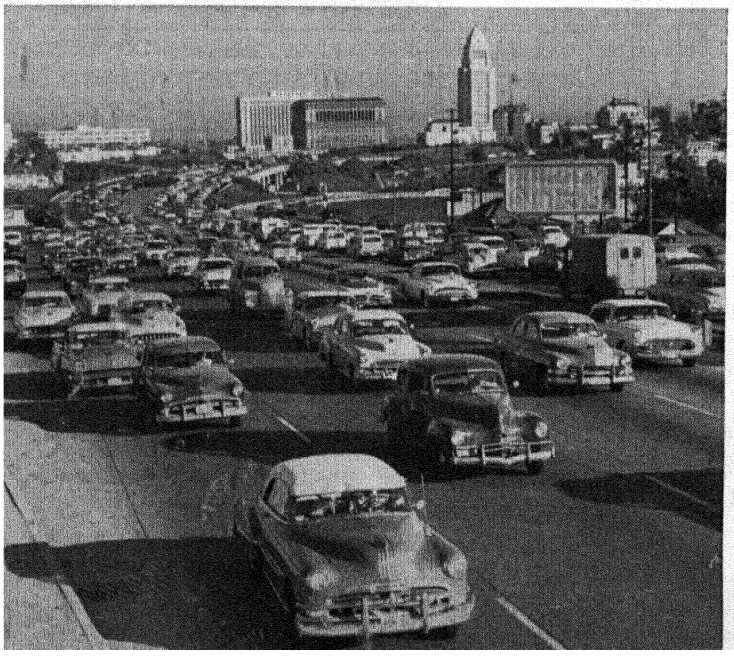
Inhabitants	Communities
1,000,000 or more	5
500,000–1,000,000	13
250,000–500,000	23
100,000–250,000	65
50,000–100,000	126
25,000–50,000	252
10,000–25,000	728
5,000–10,000	1,176
2,500–5,000	1,846
1,000–2,500	4,158
Under 1,000	9,649
	18,041

**Statistical Abstract of the United States, 1953,* p. 27. The larger communities are cities and not metropolitan areas. Omitted are 457 urban places of less than 2,500 inhabitants.



Rapho-Guilliumette by Refot

Automobile Club of Southern California



124 Type of Local Transportation Influences Social Life

Here we see a street scene in Copenhagen, and another in Los Angeles, at the close of a working day. Copenhagen with a population of 1,289,000 in 1956 had an estimated 700,000 bicycles and only 65,000 passenger cars, whereas Los Angeles with a population of 2,298,000 had perhaps over a million cars and 160,000 bicycles. Variations in the type of local transportation reflect differences in the standard of living and affect many social phenomena, such as the distribution of the residences of workers, marketing habits, and types of recreation.

like Atlantic City or a place where there are many retired elders, like St. Petersburg, Florida. Then there is the home of a government like Washington, D.C. In Hollywood the dominant industry is making pictures; in Detroit, making automobiles. Some cities are mainly commercial, like Spokane, Washington. Others are largely industrial, such as Flint, Michigan. Some places are dependent upon one industry, as is the case with Midland, Michigan, while others are highly diversified, such as Rome, Georgia. Very large cities usually cannot be classified by any one type of economic activity. For each has a high development of trade and many different kinds of industry, though the industry in New York City is generally light industry like the garment industry and in Chicago it is heavy industry like steel and metal-working.

Another factor which causes cities of the same size to be different is the culture of the regions in which cities are located. If there is a high degree of illiteracy in the region, illiteracy will be high in the city. So also if at one time a society has more highly developed religious activities than at a later age, this change will be reflected in the society's cities. A city takes on some of the characteristics that are common to the culture of the region at the time.

Cities differ, too, because of variations in one element of material culture, namely, transportation, especially local transportation. The streets of Bangkok are filled with rickshaws, bicycles, taxicabs, horsedrawn carts, as well as a few automobiles. Boats were an exceptionally good method of transportation before gasoline, steam, and electricity were used. Canals were used as streets in Venice, Bruges, and Bangkok.

Large cities differ from one another less than small places. There is a good deal of similarity in the appearance of most American cities, with their bus lines, neon signs, advertisements, drugstores, cafeterias, suburbs, etc. In India, where the transportation is less well developed, there are greater differences. Delhi is spacious, Patna lies along one street, Calcutta is a congested conglomeration, and Bombay is like a city of the West. Small places are likely to show even more variation than cities. Richmond is more like Boston than a near-by Virginia village is like a near-by Massachusetts village.[6]

There are various factors causing communities of the same size to differ, other than economic, transportational, religious, and educational. Some will be noted in later paragraphs.

Urban and rural communities. For a long time, differences in communities according to size have been noted for just two kinds, rural and urban; and the differences are usually exaggerated by a delineation into what is called ideal types, a term which seems to make exaggeration scientifically acceptable. Where shall we draw the line between rural and urban? For the United States the line was drawn long ago by the U.S. Bureau of the Census at a population of 2,500, except for a few incorporated places of lesser population, and a few larger places that were not incorporated. In Iceland it is drawn at 300, but in Holland only municipalities of over 20,000 inhabitants are called urban. In the United States farmers usually live in dwellings that are more or less in the center of their farm lands and hence are not in villages or hamlets. A similar practice exists in Norway, but in most areas of the world farmers live in villages from which they go out to cultivate the land. Where the size of farms varies from one acre to twenty, the villages are necessarily small. Our concern in this analysis is not so much with the life of the farming population scattered in isolated farms in the open

[6] W. F. Ogburn, *The Social Characteristics of Cities* (Chicago: International City Managers Association, 1937).



Daily life in El Cerrito . . .

Life in El Cerrito, New Mexico, in the 1930's is important sociologically because in communities somewhat similar a large proportion of the world's population lived for many centuries.

There are twenty-four families living close together in this village. In addition to homes, the only other buildings are a church and a school. The men are farmers with less than four acres of irrigated land and ten to forty acres of dry land per family. A family has one to three horses. There are a few milk cows, and chickens are common. The crops are corn, beans, and alfalfa. There are fruit trees and garden produce. Only occasionally are products sold. Some earn money by working at jobs in outside towns or on farms during part of the year. Families own their own farms. There is one farm laborer. Two families have much larger holdings than the others. The smallest farm is one quarter of an acre. But there is not a great deal of difference in the level of living of the farmers and the laborers, or in their status. Inequality is less, probably, in El Cerrito than in most small agricultural villages. Some trading is done in a near-by larger village and in Las Vegas, thirty miles or a half or whole day's journey away.

El Cerrito is isolated because of bad roads and infertile lands. Low incomes and the Spanish language augment the isolation. So it has characteristics of a Spanish village of several centuries ago.

In El Cerrito there is much visiting, especially of women and children, while the men are at work in the fields. In a single afternoon one family had fourteen visitors, some returning three or four times. Visitors often stay for meals, but formal invitations are unknown. Loneliness among adults is unknown. Visits of children are so common that it is difficult for a stranger to know which children belong to which family. The children become readily socialized, and the only child who associates largely with adults is not in El Cerrito.

Women are kept quite busy with household duties in a never-ending daily round, while the men work away from the dwelling. Separation of men and women is pronounced, and begins with unmarried youth. The family keeps women at home, and they go to town perhaps only once or twice a year. Men go more often and take seasonal jobs in other places. Seclusion could describe the life of women. The ideal woman symbolizes virtue and goodness in the family. She must be pure, religious, and obedient to her husband. Her complete life is devoted to home and family.

Recreations are the kind that require no money. The most common is the dance, held in the schoolhouse every Saturday night, to which the adult population of the village go, the young to dance, the old to keep time to the music and to converse. The dance may be stopped at any time for an elder to make a speech. Dancing is almost universal in village life everywhere, except where a religion forbids. Going to town, political rallies, and fishing are other types of recreation. Visiting should also be considered recreation.

A non-resident priest comes once a month

to hold mass and hear confessions. But services are held every Sunday and sometimes oftener. Only a few may not attend, and are expected to explain their absences. After services, the men meet outside for a half hour or more of conversation. The priest is not only a spiritual leader but is a source of advice on various personal and community matters. Funerals and weddings are church functions, and the church also has a special celebration for the patron saint's day.

Village cohesion based on homogeneity of occupation, religion, traditional background, and isolation is greatly strengthened by kinship ties, for each villager is kin to many others in the village. The family is large, as is the case in villages of early Europe, in India and in China. The family consists of aunts and uncles, nephews and nieces, as well as grandparents and grandchildren, though they do not all live under one roof. Since the population is small, there is much kinship. Kinship ties, like family ties, are strong, since they are based on the early associations of childhood and common interests. The visiting is more frequent between relatives than with others. Similarly eating together is more common among kin, as is borrowing of tools and food and helping with labor. All these mutual aids would not need special comment if the members of the large family all lived under one roof. But even when they live in different houses, the assistances they provide one another are somewhat the same as if they all lived in one dwelling.

The family is the channel through which all activities flow. The church uses the family to practice and teach its precepts, and the family in turn supports the church. When a child takes its first communion, all the near relatives are expected to attend, even if they must come from a job many miles away and at great cost. Marriage and death similarly draw an assemblage of kin. The number of relatives present is an index of family prestige. It is natural, therefore, that the chief leaders are the heads of the largest family groups. To be recognized as a good citizen in El Cerrito, one must not only support one's wife and children but also one must give aid to parents and kin when they are in need. Failure to do so brings formidable censure. Likewise, adequate aid and generosity to kin bring the highest praise.

Economic values are subordinated to social values, and a sense of property is not strong except in regard to land ownership. Food and tools are freely borrowed, and exchange of labor is common. For any large undertaking, as many as needed will help. It is as though the whole village was one big family. The solidarity is so great that there is very little factionalism. This is unusual, for generally in villages rivalry for power and prestige leads to feuding. An injury to an individual is an injury to the whole family group. Leadership happens not to be highly developed in El Cerrito, either. The precedence of other values over economic is shown by the fact that an absentee will return to live in El Cerrito, even though his income is a small fraction of what he earns outside. Hard work and thrift are not considered to be moral virtues, though their value is recognized for security. Economic life could not go on except for the medium of honesty, which is taken for granted, always in evidence, and never questioned. In an exchange or sale of goods a man will never misrepresent an article. In a loan of a small sum of money, there is no question of a repayment. To make a written note of it would be an insult. There is no crime, and the county sheriff has never been called to the village.

(Adapted by the authors from Olin Leonard and C. P. Loomis, *Culture of a Contemporary Community, El Cerrito, New Mexico,* U.S. Department of Agriculture, 1941.)

125 Life in a Small Community

The village of El Cerrito is set in a land pocket cut out of the Pecos Mesa by the Pecos River. Here the meandering stream has made an almost circular valley enclosed by steep banks and cliffs. There is just room for the village — some 20-odd houses of stone and adobe — and a few small fields that produce most of what is grown by the villagers. All the other fields must be dry farmed. Mankind throughout most of its long history has lived mainly in small communities and presumably has had ample time to learn to make good adjustments.

country as in the more closely knit hamlets and villages.

Recently the term "folk society" has come into use in contrast to "urban society." The word "folk" suggests folk songs, folkways, folk museums. The term folk society does not include those rural inhabitants who farm with much machinery. Anthropologists who have recently been studying contemporary small communities that have some contact with modern towns or cities use the term to apply to such communities. Folk society sometimes seems to include the tribal society of primitive people and sometimes not. There are also said to be folk societies in cities. More recently the term "little community" has been used and seems less confusing than the term folk society.

Little communities are set off from large ones by size of population, size of area, and density. An outstanding sociological characteristic that differentiates a little community and a large one is the extent of the acquaintances of an inhabitant among the other residents, and particularly an acquaintance that brings frequent contact. In a very small place each person knows every other person. In a mining town of 1,500 inhabitants in the United States it was found that an average person had a speaking acquaintance with about one-fourth of the people in the town, and knew by sight, name, or reputation about nine-tenths of the adults.[7] In Chicago an inhabitant may spend a whole day on State Street and never see a person he knows, though he may see tens of thousands of people.

From frequent face-to-face contacts among the members of a little community there flow several results. From such contacts each person knows a great deal about his neighbors, their activities, preferences, and attitudes. If the citizens do not read or travel very much, then much of their interest is in the activities of their fellow citizens, which become a subject of conversation. Hence there is gossip, to which we are sensitive, since our conception of our self comes from the opinion of others. Gossip, like slander, may be serious. Since gossip is feared, it acts like the police and is better than the police in forcing conformity. Since the inhabitants are continuously "sizing up" everyone else, status or "standing" in the community is important and well known. One knows those with whom one does business, and written contracts are less important than a word of honor. If a youth marries in a little community, he does not marry a stranger. Written life histories are not required in employment. Crime committed by one inhabitant against another is rare. Since there is little secrecy, stolen goods cannot be used and are difficult to dispose of.

Little communities of the twentieth century do not show these traits as strongly as did the more isolated communities of several centuries ago. Contacts with the world outside the little community through the post office, the bus, the private automobile, the telephone, radio, motion picture, and the importation of goods for sale bring outside interests and lessen the preoccupation with local affairs.

In a little community there are not many social organizations. Such a community is too small to support a missionary society, a YWCA, or a Rotary Club. The few organizations most frequently found in a small community are the family and some religious organization. These two organizations perform many functions other than procreation, child-rearing, and worship that in a large community would be found in single special purpose organizations such as a factory or a sports club. Hence the family and the religious organization become powerful and influential. In more recent times small communities have one or more

[7] Albert Blumenthal, *Small Town Stuff* (Chicago: The University of Chicago Press, 1932), p. 124.

stores, a gasoline pump, and a school. There may be informal groupings for a particular time and a special purpose. Thus there may be an occasional dance with one or more local musicians furnishing the music. Women may find sociability in doing work such as washing clothing together. For these functions there is no formal organization with a president and secretary.

Of especial interest is the absence of organization for help in case of misfortune or distress. There may be leaders but in many communities no organized government. There are no old age pension commissions. The task of aid and protection may be largely assumed by the family, or in part by a religious organization. Since there is much hardship in life, family and kin are very important. Punishment and the function of courts is a task of the family. Into what family a youth marries is of great concern.

When there is not much money circulating in a small community, there is not a great deal of barter of goods either, for it is a cumbersome process of exchange. Under conditions of slow barter and little money, there is likely to be a good deal of borrowing, especially between families that are kin to each other. If there is no rule of community exogamy (the rule that one must go outside the community for a marriage partner), there will be few families in a community that are not kin to other families. Borrowing may become a community trait. It is the same with services. There is much mutual aid. If a house is to be painted, a feast given, a body to be buried, a sickness nursed, neighbors come in to help, especially relatives. There is under this system reciprocation of an undesignated nature at some undefined time in the future, say, at harvest time, or at the birth of a child. Gifts are a means of exchange; and giving gifts may be frequent, even if the gifts be small.

This system of mutual aid extends beyond crises to minor events, so that in the small community there is an atmosphere of kindliness not so often evident in the monetary economy of the cities where dealings are with strangers.

Since there is very little organized recreation in a small community, there is likely to be a good deal of visiting, several times daily, especially between relatives. These are called "open families," since the door is open for children and adults to come and go.

The reaction of a community to property. In tribal society there is little property in the community. In such a society, reputation rather than possessions becomes most desired. But with cultivation by the plow, with domesticated animals, and with some trade, property enters into the value system of the community. Ownership of property may enhance reputation, or it may permit the person, without injury to his status, to commit acts which would injure a person with lesser property. With property there is an additional leverage for power.

The property holdings of one person will be larger than those of another, since individuals differ in thrift, judgment, persistence in work, etc. A unique type of property is land, as the single-taxers have emphasized, in that it is limited, cannot be created, so that if one person acquires much, another person may be without any. Since land cannot be stolen, except by war or violence, and does not run away, it is readily passed on by inheritance. Landed wealth may continue in the same family for many generations.

So when little agricultural communities become large, there is unequal distribution of property and the beginnings of a class system. Hence communities have their powerful families. Such families, having the security of property, can afford to quarrel over boundaries, herds, transgressions, indignities, and personal differences. The atmosphere of kindliness is rent by factional-

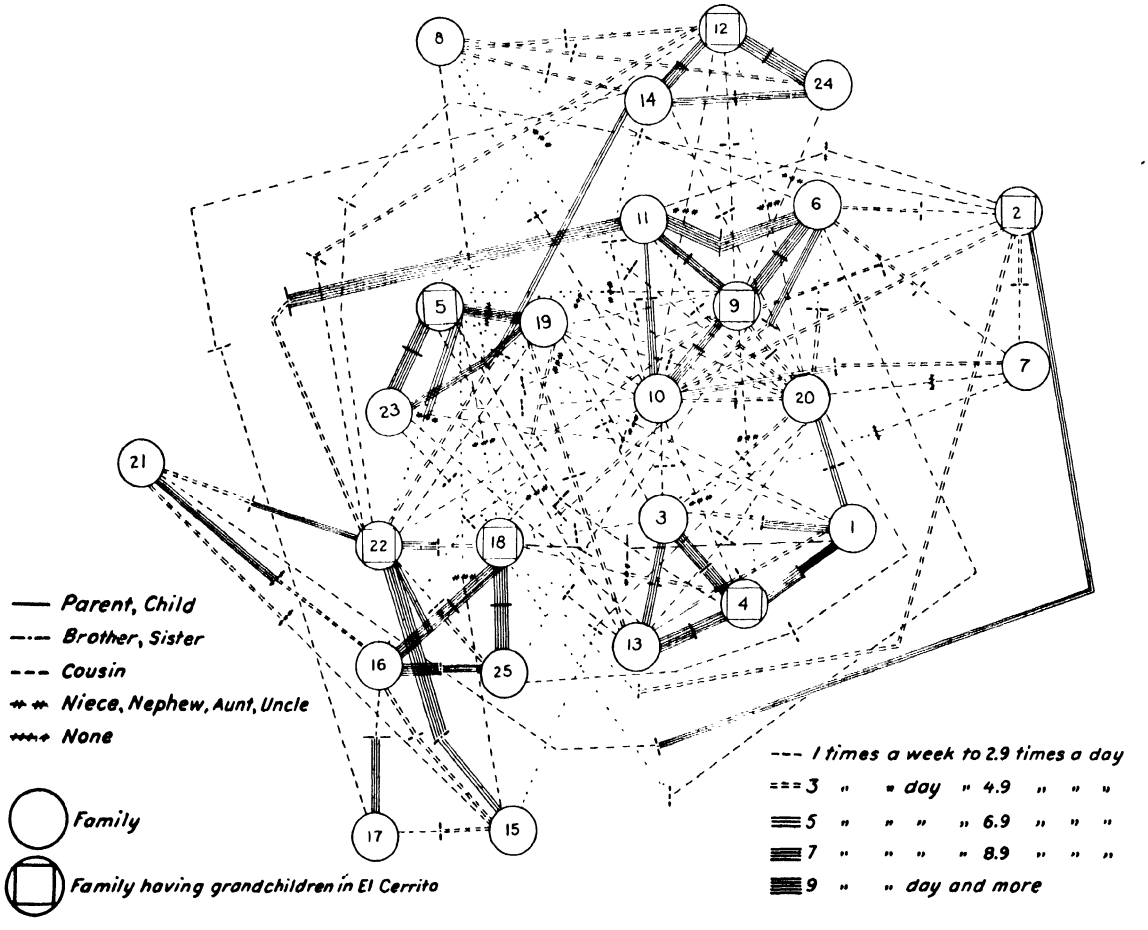
ism and feuds, often between big families. But in large communities of several thousand, outlets for rivalries may be found in religious organizations and in games.

In a small community every person occupies a rank recognized by all. Property enters into the ranking process. Also occupations get ranked. Landowners, the clergy, and the military are ranked high. Families try to acquire or maintain a high status by holding members and relatives up to some standard. Hence a relative, a son, or even a daughter may be banished from a family because of some ignoble deed. Standards are maintained by belittling those with inferior standards. Consequently communities have prestige and discrimination. These are factors in the process of maintaining standards in any organization, as well as the family.

A large community means life among strangers. Living among people who do not

126 Visiting of Adults in El Cerrito, New Mexico

The twenty-four circles represent twenty-four families, and the connecting lines indicate the number of visits in a day, which may be as many as fifteen or twenty. If a woman does not pay at least one visit a day, it is assumed that she is ill or has company. Apparently, it is impossible to be lonely in El Cerrito, also difficult to have privacy. Children do even more visiting than their parents, apparently are well socialized, and probably have few eccentricities. (U.S.D.A. Photograph.)



know you personally and are not interested in you or your conduct means a freedom unattained when living under the watchful eyes of acquaintances and friends. Though one lives in a community of 100,000, the circle of friends is limited, except among professionals such as politicians running for office. The average person today probably receives from 25 to 150 Christmas cards, though a candidate for the vice-presidency may send out 10,000. Announcements of weddings are sent to a limited number. The limited number of recipients of such greetings may live in different communities and in different parts of a large city. They are likely to be, though, in the same economic class and ethnic group.

In a city, or in a county with a mobile population composed of farmers, villagers, and urbanites, kinfolk may not all be in the same economic class. They may differ in tastes and educational attainments. Furthermore, where people move a good deal, the kin become separated. On the other hand, living in a large community there are many opportunities to make friends outside one's kin, as among fellow workers, at church, as members of clubs and associations, among tradespeople. The dwellings of these acquaintances may be widely separated. Contacts with them may be made by telephone, bus, or private automobile. Thus a neighborhood in a city has much less influence than in a little community. A neighbor is one who lives nearby; and in some big cities the interaction of a resident with his neighbors is frequent, and with persons outside the neighborhood infrequent. Such a neighborhood is like a little community within a big city. These folk societies within a city achieve their compactness and isolation often because of different language, race, or ethnic characteristics, and sometimes occupational features and income.

There is a tendency for the neighborhood to persist in cities architecturally. That is, dwellings below certain standards of quality, appearance, and spacing are not permitted, even though the residents have little interaction with each other. One reason for such neighborhood housing is the presence of young children whose playmates must live close by. Forty-three per cent or nearly half of all families in the United States, both urban and rural, in 1953 were without any child under 18 living at home.[8] The adult is more independent of the neighborhood than are the children.

It is not size of the city alone that is turning a neighborhood into a mere collection of families with little interaction, for one could conceive of a city with a large population made up of hundreds and thousands of neighborhoods with interacting families. The disintegration of the neighborhood is due to transportation, which separates the residence far from the place of work, the market place, and places of recreation. The communication inventions make for contacts much wider than those of a little neighborhood.

Large communities of strangers bring then the freedom of privacy, more freedom to act independently of the opinion of others, and some freedom from the obligatory ties of kinship; but they also bring possibilities of isolation for the timid and the introverts.

Large communities make possible a multiplicity of social organizations, with the consequent advantages of specialization. The variety of organizations in a city is very great. For instance, there are many different kinds of educational institutions. There are probably a thousand or more types of recreational organizations, including those commercial establishments which offer recreation for sale. Many are organized around hobbies, such as stamp-collecting or camera clubs. The classified telephone directory of

[8] Paul C. Glick, *American Families* (New York: John Wiley & Sons, Inc., 1957), Chapter 3, Table 9.

Chicago lists 1,050 different associations, 448 different clubs, and 217 different social service organizations. The first 20 on the list of the social service organizations are the following:

Alano Club
American Aid Society
American Boys Commonwealth
American Brotherhood
American Cancer Society
American Civil Liberties Union
American Friends Service Committee
American Jewish Committee
American O. R. T. Federation
American Polish Center
American Red Cross
American Relief for Poland
American Youth Hostels
Anti-Cruelty Society
Anti-Defamation League
Association for Family Living
Baptist YMCA Center
Bartelme, Mary, Club
Beacon House
Berry Community Welfare Center

These great numbers of special-purpose social organizations in cities reduce the social functions of the family and church as seen in little communities, but they add many new group activities.

Of special importance are the economic organizations developed since the advent of railroads and factories. Before the Industrial Revolution and the invention of the steam engine, the manufacturing units of industry were small. Many were located in the family households. The corporation had not become common. Large industry was obtained by the partnership of heads of families.

But with large factories, stores, and office buildings, members of families were dispersed in their work. The family in cities in the age of factories and corporation was no longer a center of production, and its power dwindled. Corporations that owned factories and commercial establishments became the great centers of power. An idea of the number and variety of economic organizations in a large city may be had by looking at the business directory. The classified telephone directory of Chicago has over 2,000 large pages. This fact is not surprising, since people live in cities because there they can get good jobs in manufacturing and trade.

The many and varied organizations in a city bring the advantages of specialization and of organized teamwork. These advantages are absent in the little community, where the community as a whole and the family are "jacks of all trades"; it is through these two organizations — the community and the family — that nearly everything is done. Functions of community and family drift away in the city to specialized one-purpose organizations, and new functions are added. Hospitals, with their ever improving techniques, heal better than families can; schools are likewise superior to homes in the exercise of the educational function.

The residents of a city become affiliated with a variety of organizations, though any one person is not likely to join a very great number. Members of a single family frequently belong to different organizations, for different organizations exist for men, women, boys, and girls. Since these various organizations have different customs and procedures — a boys' gang differs in attitudes from a ladies' sewing circle — there is opportunity for confusion and lack of understanding. Some homogeneity is attained, however, in a heterogeneous city because of income, class, and ethnic stratification. There is a "consciousness of kind" that acts as a magnet in drawing together people of the same background and interests in neighborhoods, recreations, clubs, and churches.

The density of population in large communities requires more regulation and services. When families live close together

in large numbers, the disposal of garbage and refuse cannot be left to voluntary action. Some would dump their garbage in the alley, an empty lot, or in the street. Accumulations of paper and trash become fire hazards. The government takes over a family function and provides for the collection of garbage. Spitting is all right for a farmer working in his field, but cities have had to pass laws prohibiting it in street cars and busses. Since a single family in a densely inhabited community cannot protect itself alone from the dangers of contagious or infectious diseases, from accidents on the streets, from fire hazards, and from organized crime, such functions are assumed by the government.

The government of a city acquires many functions, some of which are community housekeeping duties. Not all of these duties are prohibitive or regulatory. Some are of the nature of services: providing free schools, erecting houses, providing hospital service, keeping the streets clean and repaired. The adage, "the government which governs least governs best," does not apply to cities. Density of a population in a community means much government, which, of course, must be paid for.

The metropolises not only cover more area, but they are more densely packed, as shown in Table 12. In comparing densities, it should be noted that a variable factor is where the boundary line of a city is drawn. Two cities with the same number of inhabitants will have different densities if one city draws its boundary line to take in more territory than the other.

In general, the bigger cities have the more crowded conditions. The island of Manhattan in New York City with a population of 1,960,000 has 88,000 persons per square mile or a plot of ground 6 yards square per person. Even smaller would be the residential area per person, for in the total area are included the area of parks, streets, and land covered by public and business buildings.

This crowding is greater in some parts of the city than at others. There is better spacing in the newer parts near the boundary. The crowding is also greater at one time than another. For instance, many people come into the central business section of a

Table 12 · Densities, Areas, and Populations of Selected Cities, U.S., 1950*

Cities	Population per Square Mile	Number of Inhabitants	Land Area in Square Miles
New York	25,000	7,892,000	315
Chicago	17,500	3,620,000	208
Baltimore	12,100	950,000	79
Cleveland	12,200	910,000	75
Little Rock	4,900	102,000	21
Phoenix	6,200	107,000	17
Utica	6,400	101,000	16
Hamilton, O.	6,600	57,000	7.6
Kalamazoo	7,600	51,000	8.8
Muskegon	5,400	48,000	8.9
Orlando	3,700	52,000	14.1

*Population figures are from *U.S. Census of Population*, 1950, Vol. I. The areas were supplied by the U.S. Bureau of the Census. Densities computed by the authors.

city during the daytime. Into the central business section of Chicago[9] there come each day a population equivalent in number to the total population of Atlanta, Georgia. The city of London is swelled by 425,000 during the daytime.

Metropolises can have such great population densities because people live and work in layers one above the other. Structural steel made possible the tall buildings with many stories, which in turn encouraged the increased daytime density of population. Also the people must travel underground as well as on the surface and in the future they will travel in horizontal layers of air.

Large cities differ from the average city in other characteristics than density. Large populations attract certain types of activities that depend upon large numbers; New York City is important politically, for example, partly because of its very large number of votes. Also large numbers make a large market; hence wholesale houses and distributing agencies are found in metropolises. Expositions and world fairs are generally held in large communities. The best newspapers are generally in big cities.

Also certain specialized activities, as, for instance, the renting of historical costumes, do not find a sufficient market in small places. But in a big city there may be enough customers to support such a business.

Other activities, particularly commercial recreation, may reach a higher level if there is a large body of customers. Thus a large city may have a better athletic team, better theaters, superior restaurants, finer symphonies, better museums, larger zoological gardens, than a small community.

The average income is greater in the larger places. Thus the median income of males in 1949 in the United States in urbanized areas of 3,000,000 or more population was $3,078, and in urbanized areas of less than 250,000 and more than 50,000 it was $2,692. In places of 10,000 to 25,000 it was $2,484, and for communities of 1,800 to 2,500, it was only $2,268.

Also the range of income is greater in the large cities. Thus there are more millionaires than in small places. This is not simply because there are more people in large cities; in 1949, in American cities of more than 3,000,000 people, 6.5 per cent of the population had annual incomes of over $6,000, whereas in communities with populations ranging from 2,500 to 10,000, the corresponding percentage was only 3.4. The luxury goods that the rich buy are more often found in the great cities. Famous paintings by "old masters" are not for sale in little communities.

Large cities are attractive locations for manufacturers of producers' goods, semi-finished materials, and "parts" that have a large distribution. Also those industries that must buy parts and semi-finished materials find it convenient to be located in or near large cities where these materials can be quickly delivered.

The metropolis is a superb place to trade. One reason is that it has better schedules for airplanes, trains, and busses. Also a large city has many offerings, almost anything a person may wish to buy.

For these reasons the metropolis may be called the magnificent community, splendid and spectacular, and the pride of populations.

COMMUNITY PATTERNS

All aggregations have a form; and if they are heterogeneous — that is, composed of different kinds of units — they have a pattern as well. An ant hill has a form and a beehive a pattern. We should expect human communities to have patterns.

[9] Gerald Breese, *The Daytime Population of the Central Business District of Chicago* (Chicago: The University of Chicago Press, 1949).

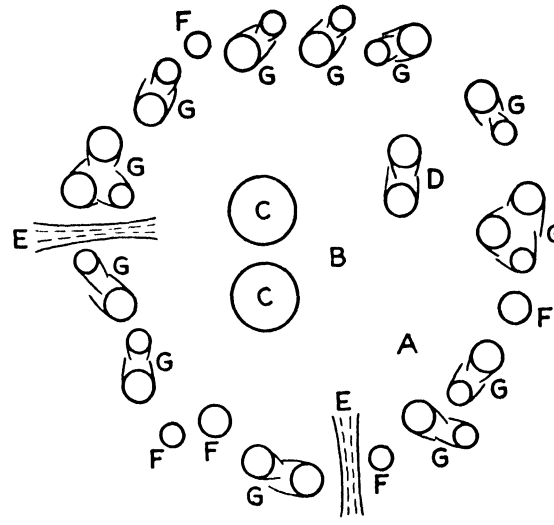
When the community consists of a few families with no occupational differentiation except that by sex, the pattern may not be observable. Sometimes the arrangement of dwellings may be shaped with reference to the habitation of the chief. Or the houses may be placed with reference to prevailing winds or access to a spring or stream of water or the seacoast or to the approach of animals or to the site of a fire, its smoke and embers.

As communities grow larger and more stable, a variety of patterns appear. Two may be mentioned.

One is the grouping of a community around a castle, fortress, or stockade. The castle of the Middle Ages was on a hill with space for food and water storage, for horses, living space for families seeking refuge, an arrangement for maneuvering of soldiers. The ordinary dwellings were placed close to the castle.

Another pattern was that of the agricultural lands of the villagers in Western Europe in the Middle Ages as shown in Figure 128.

The patterning of a community generally follows two principles. One is the division of the population into classes or subgroups. The other is location by type of business.



127 **Plan of Shilluk Village**

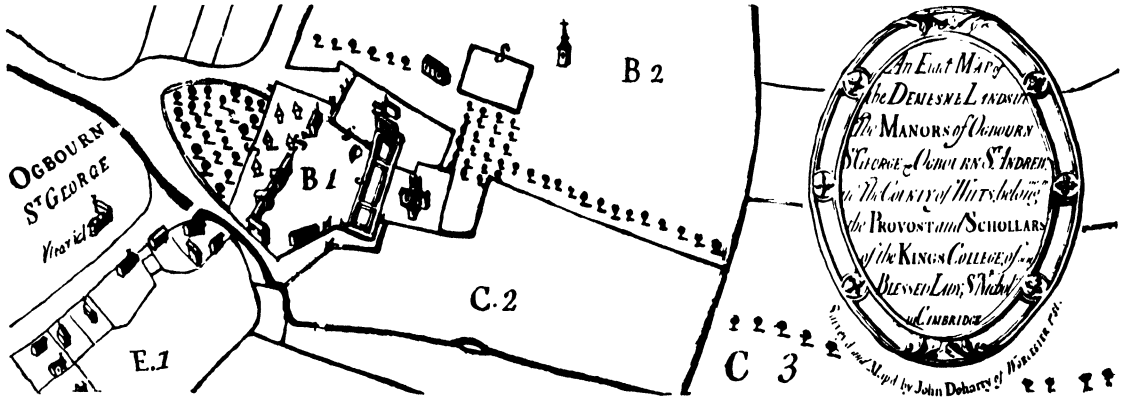
A, village tree; B, free place for dances or cattle; C, stables; D, temple; E, paths to villages; F, single dwellings for old people; G, family dwellings. Ecological factors do not seem particularly significant in determining the pattern of this primitive village. (From Robert H. Lowie, *An Introduction to Cultural Anthropology*, p. 93. Originally from Hofmayr. Copyright, 1940. Reprinted by permission of the publishers, Farrar and Rinehart, Inc., and George G. Harrap & Co., Ltd.)

Residential Patterns

Families with like characteristics tend to live together in the same areas of a community. One of the earliest and still most widespread bases for differentiation of a community is similarities among subgroups of inhabitants. Even in a small and simple village in India, the very poor, who do menial tasks, live together separate from the rest of the villagers. In America, the expression "he came from the wrong side of the tracks" implies that social distinctions make for different residential locations.

As villages grow into towns and cities, property increases; and since there are individual differences, property becomes unequally distributed. There are rich and poor. The rich tend to live together in the same neighborhoods and the poor in different neighborhoods. Los Angeles has its Wilshire district and its East Side, New York its Fifth Avenue and Lower East Side. There are many such different residential locations in large cities based upon income differentials.

There have been exceptions to this residential pattern. Before the days of paved streets, busses, streetcars, and bicycles, it was convenient to have household workers live near the homes of the wealthy. But even then, the social barriers were well maintained.



128 The Pattern of an Early English Village

The peasants lived in a few cottages along the one street and cultivated the outlying farmlands. If the village was small, there were no shops nor, at that time, schools. There was, though, a church and a house for the parish priest, an important figure in village life. The village and surrounding lands were owned by the lord, who lived in the large manor house. There was a common pasture and a near-by forest for firewood and game. One-third of the land was for spring planting, one-third for fall planting, and one-third was left fallow. Farming in scattered strips had been abandoned at the time the map of the village of Ogbourn, shown above, was made.

There are communities where all homes are much alike, and there is little inequality in the distribution of income. Such is a "trailer" park. In a community made up of "mobile" homes, there is little segregation of residences.

Similarities of income bring other similarities, as in amount of schooling and also in occupational levels. There are thus clusters of characteristics for a neighborhood.

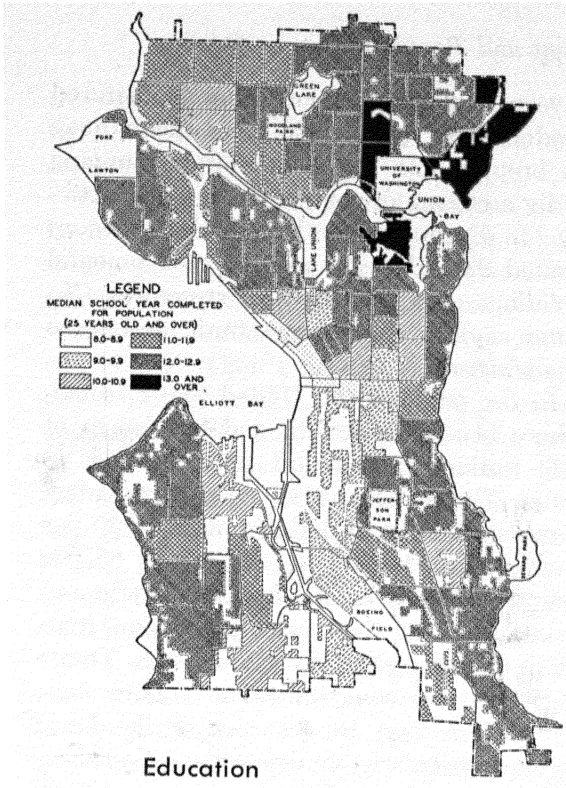
The presence of children is a factor that tends to draw like families together in the same locality. Particularly do they like to have their children associate in school and on the playgrounds with other children of similar tastes with whom they may later wish to do business or intermarry. For their children, Sunday Schools and church are also selective factors and are important for residential location. Bachelors and spinsters and families without children are not so dependent upon neighborhood schools and churches.

Segregation of residences is affected by other factors than income. Ethnic bonds draw people together. Thus there are Polish areas, Bohemian communities, and Italian neighborhoods. In addition to language, other ties are food habits, social customs and traditions. Races also tend to live together, as in "Chinatown" or in Negro quarters of the city. But even inside ethnic and racial residential areas there is some segregation on the basis of income.

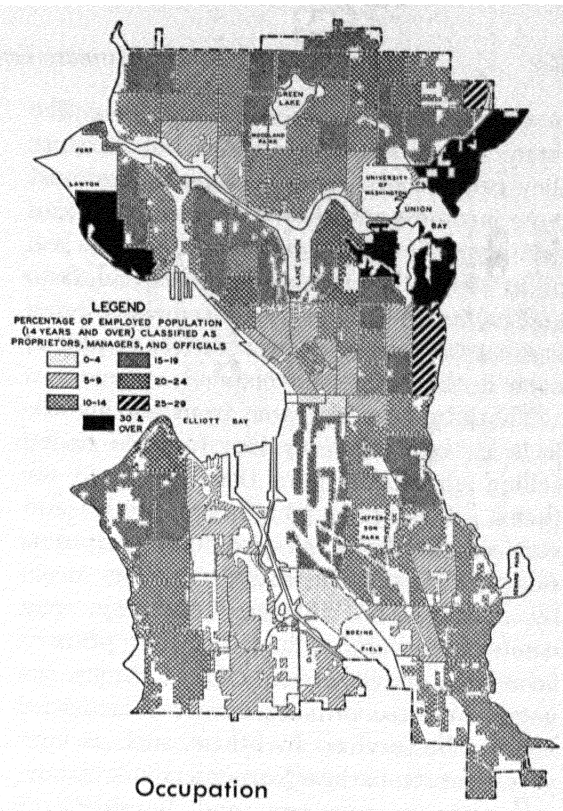
Occupational segregation was more evident when local transportation was poorly developed. Factory workers lived near factories. Workers in the stockyards of Chicago lived near by, "back of the yards." But when streets become congested, there are still advantages in living near one's place of work.

Economic Patterns

Cities are built around manufacturing and mercantile establishments. People live



Education

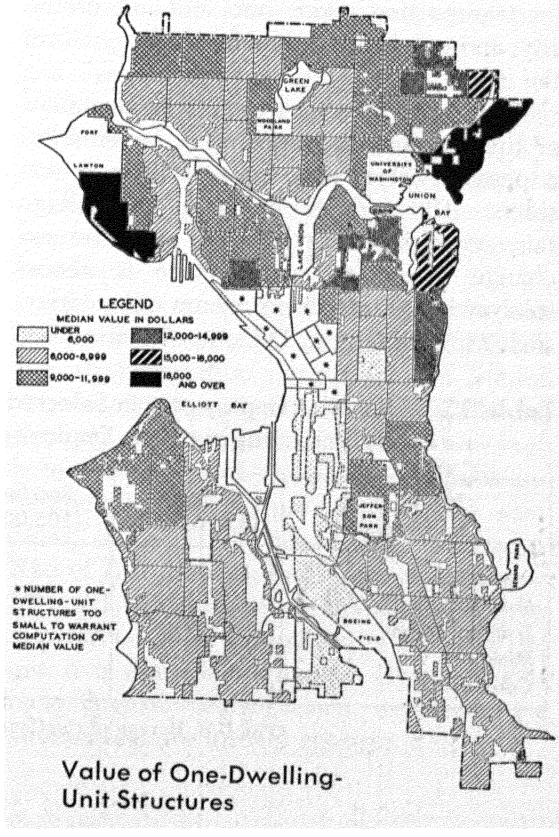


Occupation

129 Education, Occupation, and Residence: Seattle, 1950

On these maps the more darkly shaded areas show the locations of the residences of the more highly educated, of those in better paid occupations, and of the more expensive homes in Seattle in 1950. That education, wealth, and fine homes are so closely associated illustrates the idea of Franklin Giddings that "consciousness of kind" is the basic principle of human association. It may be asked if the causal factor in the similarity of these three maps is economic or educational. Income makes possible higher education and better education makes it possible to earn more money. Free public schools are significant because they weaken the barriers to movement up from a lower class to a higher.

These maps are from the Office of Population Research, University of Washington, and were presented by Professor Calvin Schmid of that office. The map showing occupational status is based on the percentage of the population over 14 years of age who are classified as proprietors, managers and officials. (A map based on the residential location of male laborers shows their residences generally to be in the more lightly shaded areas of the present maps.) The map based on the median value of residences is for single-unit structures; there are not many such structures in the downtown section of the city.



Value of One-Dwelling-Unit Structures

in cities not necessarily because they like them as places of residence but because they can get jobs there. People to live must have incomes; and they live where they can get incomes, whether on farms, on the sea, or in cities. There are differences in taste and habits, but the pressure to make a living is great; so people live in a variety of places, even in the Arctic wastelands.

The jobs in cities come from making objects or rendering services for sale or by selling goods for more than was paid for them. The sale of these goods and services is both to insiders and outsiders. These outsiders may be nearby farmers or villagers, or they may come from afar. Such is the primary economic activity of a city. Citizens engaged in these primary economic activities need to be serviced by others, such as lawyers, dentists, barbers, carpenters, merchants, restaurateurs, repairers, and hundreds of others. Particularly essential are vehicles for transporting goods into and out of the city, and especially if the city is large, within the city as well.

There are exceptions to this arrangement of the economic activities of a community. A peasant village may sell very little to outsiders. The farmers living in the village raise enough food close by, and the exchange of village manufacture is almost solely within the village. Some cities today, such as Washington, D.C., or Atlantic City, have a negligible amount of manufactured products sold outside. In some, money may be brought into the community by mining or by a college or some governmental activity. In Europe many large cities grew up around the palaces of royalty, governmental buildings, and ecclesiastical structures. To these capitals there came trade and some manufacture.

In the cities of the United States, somewhere between one-fifth and one-fourth of the working population are engaged in trade. The percentage engaged in manufacture varies more, usually from 25 to 50 per cent, though it may go as high as 65 per cent and as low as 10 per cent. Trade and manufacturing, then, usually occupy from 55 to 65 per cent of the labor force. Transportation and communication workers constitute less than 10 per cent of the labor force, particularly in the towns. Construction workers comprise around 5 per cent. The small cities and towns have more variations in industrial employment. For instance, Table 13 shows that Galesburg has many employees in railroad shops through which money flows into the city; Harrisburg, Illinois, has a comparatively high number of miners.

Cities have a central trading area, with manufacturing along a railroad line, and sometimes a belt of transportation around outskirts, as well as radiating routes. Trade in a city is of two kinds, that for fam-

Table 13 · Kinds of Employment in Selected Illinois Cities and Towns, with Their Populations, by Percentages of the Employed Population, 1950*

Industrial Classification	Chicago (3,620,000)	Rockford (105,000)	Galesburg (31,000)	Harrisburg (10,000)	Macomb (11,000)
Trade	20	19	18	24	26
Manufacturing	35	50	19	7	21
Transportation	9	3	26	8	4
Mining	—	—	—	20	—
Construction	4	4	5	6	6

*The U.S. Bureau of the Census for the State of Illinois, 1950.

ily consumption or individual buyers and the trade between industries for parts and materials.

For the first kind of trade, American cities have a downtown shopping center where nearly all types of goods and services are sold. In very large cities there are several subcenters, but none nearly so large as the city center. Then scattered throughout the city are many local markets selling groceries and articles frequently bought. In the center are the offices of wholesalers and also the administrative and executive offices of manufacturers whose plants are located elsewhere. Other salesmen, such as insurance agents and physicians, have locations in the central shopping area.

The second kind of trading, that which takes place between manufacturers, consists in the purchasing of parts and materials of which there are thousands of kinds. Many manufacturers cannot afford to keep large inventories, nor can they make their parts or process all the materials. It is more profitable to buy them from smaller manufacturers and suppliers. The sales places for most of this material are seldom in the central downtown shopping area. Such material may be sold directly from the factory or from nearby supply houses. This type of trade is essential to the life of a city and of considerable appeal to certain types of manufacturers to locate in or near the big city.

The industrial areas of a city are near to railroads, which may run to some terminals close to the center of cities, off from which there may be spurs leading to manufacturing plants. Along these railroad lines manufacturing plants may be strung. But there is an advantage in having manufacturing plants in the same area. There may be several such areas in a city some distance from the city center and the residential districts. These industrial areas are also on or near through highways, since large amounts of freight are transported by truck.

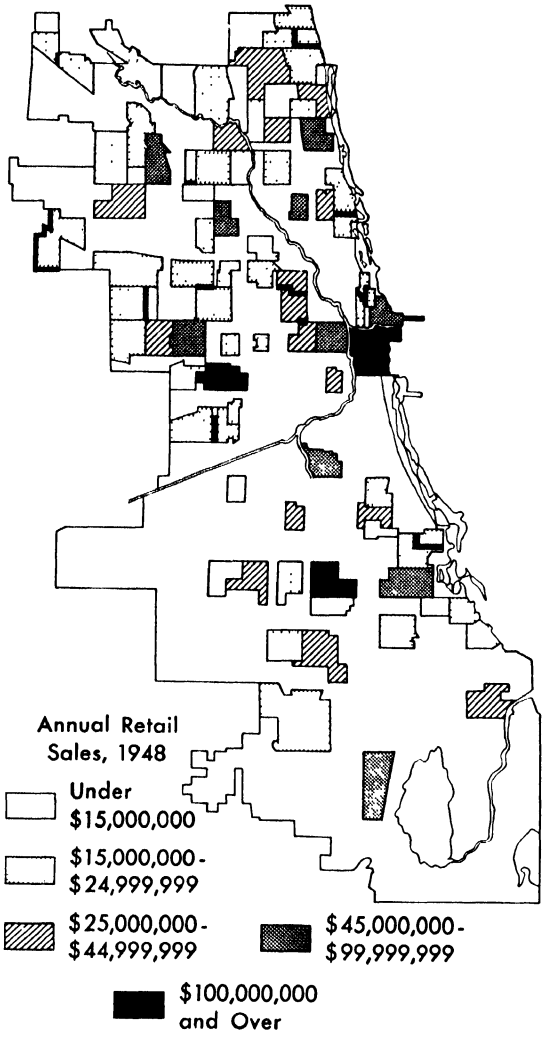
Transportation serves not only the personal buyer but also factories and stores. For the latter there is much loading and unloading and transference to other routes. For these purposes there are freight railroad yards, docks, warehouses, and truck terminals. These are located near the manufacturing plants; the truck terminals for transfers tend to be scattered. Freight cars are often routed not through and across city streets but on tracks around the outskirts of the city.

Railroads and highways come into a city as radials like the spokes of a wheel pointing to the hub. Within the city these highways are often lined with stores and shops. Outside the city they are the location of villages and towns. The most important of these radial highways are being converted into expressways which carry traffic to the center of the city without cross streets or stoplights.

Neighborhoods with children tend to be constructed on side streets along which pass few cars except family automobiles and milk and delivery wagons.

Commercial airports are located on the outskirts of a city several miles from the city center, but smaller airports may be closer in. Certainly heliports will be in the heart of the city, perhaps on the tops of buildings.

There are exceptions to the foregoing outline of the location of stores, offices, factories, transportation terminals and routes. Such exceptions are found in older cities of Europe and the Orient which were built before there were railroads. Markets and handicraft manufacture were more scattered. To a certain extent the scattering is true of Los Angeles, built since the automobile and before the development of express highways. Once the pattern of a city is laid out, it is difficult to change. However, new technological developments, especially the automobile, are forcing changes.



130 The Location of Shopping Centers in Chicago, 1948

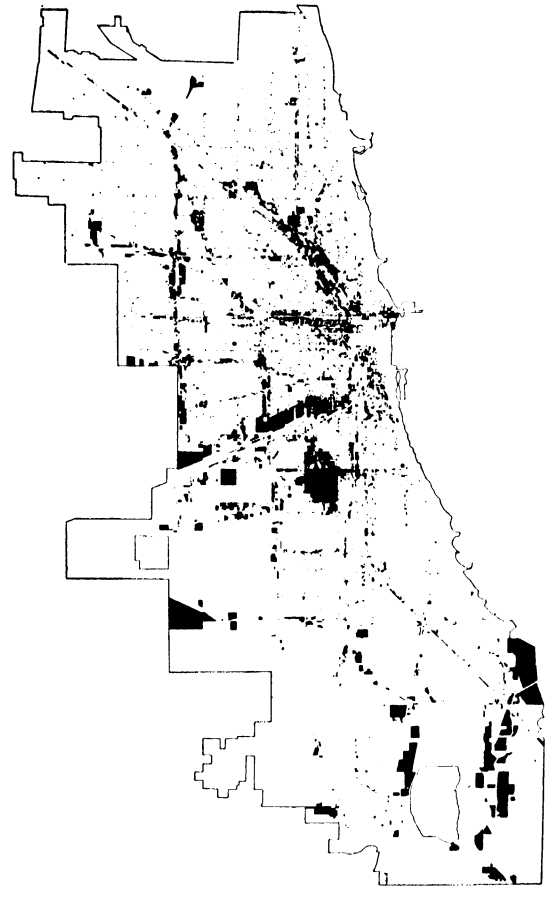
The largest shopping center is much bigger than the next largest. Though the great center of trade is so overcrowded that speed is impossible on the sidewalks, in the streets, or in the stores, and locomotion is zig-zagged and uncomfortable, people will yet travel great distances and at some financial cost to trade there, rather than trade at nearer subcenters. Dispersal of some of these central establishments to smaller subcenters may be less profitable — as long as buyers will come to the congested center to trade. Perhaps we do not object — very much — to this overcrowding. (Adapted from a map prepared by the Chicago Community Inventory, University of Chicago, 1951.)

Changing Patterns

Factories are being built outside cities, and shopping centers are arising at the periphery. Trading and manufacturing are increasing faster in the outskirts of metropolises and metropolitan areas than within the center. But factories and stores are not being abandoned or sold within the center of the city and few are moving to the suburbs. Such a movement is scarcely discernible. There is still much trade in the central shopping area. Indeed it is said to be increasing, but not as fast as in the suburbs. The fact that "downtown" stores are getting a diminishing proportion of the total trade does not mean that they are suffering an actual loss in volume of trade.

The factories which are springing up in suburbs and satellite towns are more likely to be new concerns than ones which have moved there from the central city. But there are also many new factories being located within cities. It is costly for a company to move a factory. It cannot always sell profitably, and the new factory costs a good deal of money. In fact, there is a certain permanence about buildings. This resistance to change is so great that buildings must actually be demolished to make way for change.

The development of branches of big and famous department stores near the wealthy suburbs and the building of supermarkets near the boundaries of cities are due to the fact that these outlying areas are increasing in population faster than the areas within the city boundaries. There are new and growing markets to be captured there. Cities, even when they are young, grow faster at the periphery than at the center.



131 The Location of Industry in Chicago, 1951

These factories, warehouses, wholesale establishments, and railroad yards, as shown by the dark areas on the map, are along the rivers, canals, highway radials, and lakes, but not very much on Lake Michigan, where residences and hotels are numerous. The locations on transportation routes close to each other facilitate the trade in materials that goes on between these establishments, which is the lifeblood of the city, though seen less by the average city dweller than the trade of the shopping centers. Near-by areas are not highly favored locations for residences, but industrial establishments are becoming much less smoky, noisy, and smelly under the growing appeal for sanitation and beauty. (Map by the Chicago Plan Commission.)

The increasing population at the periphery of small cities can trade in the central shopping area, but this becomes more difficult when the city grows and covers a greater area and has a larger population. Increase in population means greater use of the streets leading into the central shopping district. Typically, these streets are laid out before the cities become populous. In an old city the streets are sometimes very narrow indeed, as in the old sections of Paris and in many European and Asiatic cities. The population increases quicker than the streets can be widened. So difficult is it to widen streets in many metropolises that subways are more easily constructed.

Automobiles have increased the congestion, since there were 13 automobiles of all kinds for every 10 families in the United States in 1954. Though the automobile can travel, say, ten times as fast as a horse and buggy, it is said that to travel across the downtown shopping area in an automobile at a rush hour takes longer now than formerly it took with a horse and buggy — and sometimes longer than it takes to walk.

That city streets have become too narrow for the traffic in the business section is a cause of many changes. Street congestion is an important factor in the development of supermarkets and the location of department stores in sections where streets are less crowded and where free parking space is readily available. Restaurants and motion picture theaters are also moving into more open areas. Factories, too, need parking places, and also a fast approach, since factory employees now own cars.

City families move to the suburbs, but others move into the city. The attractions of space, quiet, sunlight, playgrounds, lawns and gardens have always existed, but in the past they have not been readily available for families whose heads and members

work in the city. Today they have been made available in a large way by the addition of the family automobile to the suburban railway.

The rapid growth of the suburban population is indicated by the rate of increase of population of the central city as compared with that of the outer ring surrounding the city. The increase was 35 per cent from 1940 to 1950 for the ring, as compared with 13 per cent for the central cities of 125 American standard metropolitan areas of 1940.[10] (During the same period, the population of the United States as a whole increased 14.5 per cent.)

This great growth of suburbs and satellite towns is not entirely the result of people in the city moving out into near-by communities. Many newcomers to the metropolitan area who are to work in the central city settle in the suburbs from the outset. But also migrants from a distance move to the city into residences vacated by city families moving to the suburbs. The central cities are not being emptied of their population. Of 91 cities of over 100,000 population in 1940, 85 increased in population from 1940 to 1950 despite the movement to the suburbs.

The per capita incomes of those who live in the ring surrounding the central city are larger than of those who live in the city. The incomes of males (likely, of course, to be heads of families) who live just outside of the city but on territory contiguous to the boundary line are 7 to 15 per cent higher (1949) than of men who live in the city.[11] These families living on the fringes of the big city have more young children than the families living in the city — 15 or 20 per cent more children under five years old per 1,000 women 20 to 44 years old.[12] Also there are around one-third fewer divorced and separated persons per 1,000 married couples.[13]

There have been various attempts to develop generalizations about the process of the growth of a city outward. One process is outward expansion in concentric circles, another is growth along radial lines, and a third is the addition of segments or blocks to population in various places where there is vacant land, sometimes called multiple nuclei. American cities have both radial lines and concentric circles, though these are somewhat idealized descriptions. The radial development is very noticeable in the metropolitan area, as is the growth by multiple nuclei, that is, by satellite towns and villages. European cities seem to grow more by multiple nuclei than American cities.

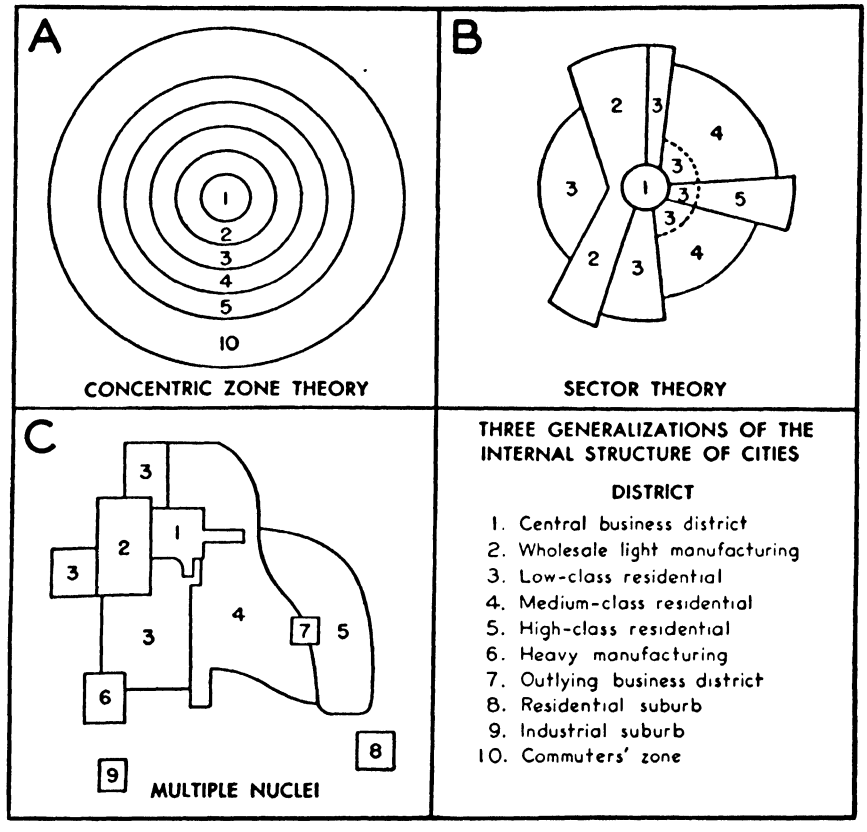
Neighborhoods are changing in the city. The shifts in population tend to redistribute the segregated groups who make up a city's population. The changes in the neighborhoods near to the central business district have brought many social problems. Part of this area in the nineteenth century contained homes of the wealthier citizens. As these wealthier families moved outward, what happened to their large fine dwellings? Since a single family could not afford to live in one, they became apartments and rooming houses largely for men, or the larger houses were occupied by several families, with sometimes more than one person per room. Some were rented out for small businesses, such as restaurants, repair shops, or for associations or clubs. Some houses are torn down to make room for a filling station or a small store. A business area makes contact with a residential neighborhood which was at one time occupied by the wealthy. There are also often warehouses, junk yards, railroad shops, and light manufacturing establishments in this interstitial area. These

[10] Donald J. Bogue, "The Geography of Recent Population Trends in the United States," *Annals of the Association of American Geographers*, 44: 124–134, June 1954.

[11] U.S. Bureau of the Census, *U.S. Census of Population: Characteristics by Size of Place, Special Report*, P.E. No. 54, Table C, p. 5A–11.

[12] *Ibid.*, p. 5A–8.

[13] *Ibid.*, Table 3.



132 Structure of Cities: Three Theories

Sociologists want to know the patterns of growth of cities, because knowledge of such patterns can help in city planning. The three theories of the way cities grow as shown in the accompanying designs are really three different processes, although the development of many cities represents a composite of these three processes. Perhaps busses and nonstop through streets favor development into sectors. Cities built before mechanized transportation were somewhat more likely to develop multiple nuclei. (From R. B. Mitchell, ed., "Building the Future City," *Annals of the American Academy of Political and Social Science*, November 1945, in W. S. and E. S. Woytinsky, *World Population and Production*, p. 132.)

contacts seem quite commonly to lead to a deterioration of a neighborhood. Into this slum drift homeless men, and here is a high rate of juvenile delinquency. Here also come unusually large numbers of alcoholics; and commitments of the insane are greatest from this "blighted" section of the city.

Neighborhoods change also because of new immigrants, such as Mexicans or Negroes. New homes are not provided in advance for these in-migrants with low incomes. Instead they get cheap accommodations by crowding several families in a small space where they pay a rent which is high enough per room to make it profitable to the owners. They come in kinship groups or from the same village, and speaking the same language, cluster in the same neighborhoods. As they come into the neighborhood, the former residents move out. And so a section once occupied by, say, the Italians becomes inhabited by Puerto Ricans.

The neighborhoods occupied by foreign-born immigrants in American cities may

change quickly, particularly if immigration is restricted. These immigrants and their offspring prosper and move to better neighborhoods, making room for new immigrants. This process is called "succession." Deterioration is hastened by the wear and tear on houses and the unwillingness of a *laissez-faire* real estate system to keep the homes in adequate repair. Very large areas of a city may thus become deteriorated and a shame to civic pride. This process of succession affects real estate values, the nature of churches, the types of attendance at schools, the kinds of customers at stores, and indeed many of the values that families hold important.

Transportation is an important factor in changing urban patterns. Inventions of local transportation are changing the pattern of cities and particularly of metropolitan areas. As factories are built in the outskirts of cities not too far from the labor supply, industrial suburbs arise. These tend to be in the same general area, as for instance, south of the city.

The locations of industries are likely to be closer to the city than is best for their protection in case of aerial bombing, since it is to their advantage to be near the railroad belt line that runs through the outer ring of a metropolitan area and also near truck terminals. The large city has better schedules for freight cars, trucks, and indeed all types of transportation, especially airplanes.

The effect of the location of a large commercial airport is to discourage the building of residences near by because of the noise. The use of commercial helicopters will probably have some effect of increasing the scattering of suburbs further. The extent of the influence will depend upon the use made of them. Large passenger-transport helicopters from satellite cities will make the good schedules of the main-line air service more readily available. A roadable [14] family helicopter will have some effect on scattering of residences. With the school bus, families are less dependent on proximity to schools. In communities without abundant local transportation at prices within the family budget, householders must live close to schools, churches, libraries, post offices, transportation stations, and stores. With highways and helicopters they can live farther apart; but the costs of electric wiring, sewerage, pipes, and paving are still pressures to make families in the outer ring of the metropolitan area live close together. It is also possible that more dwellings not in hamlets or villages will be found along the sides of automobile highways, though not the expressways.

[14] That is, one that can fold its wings and be driven on the highways like an automobile.

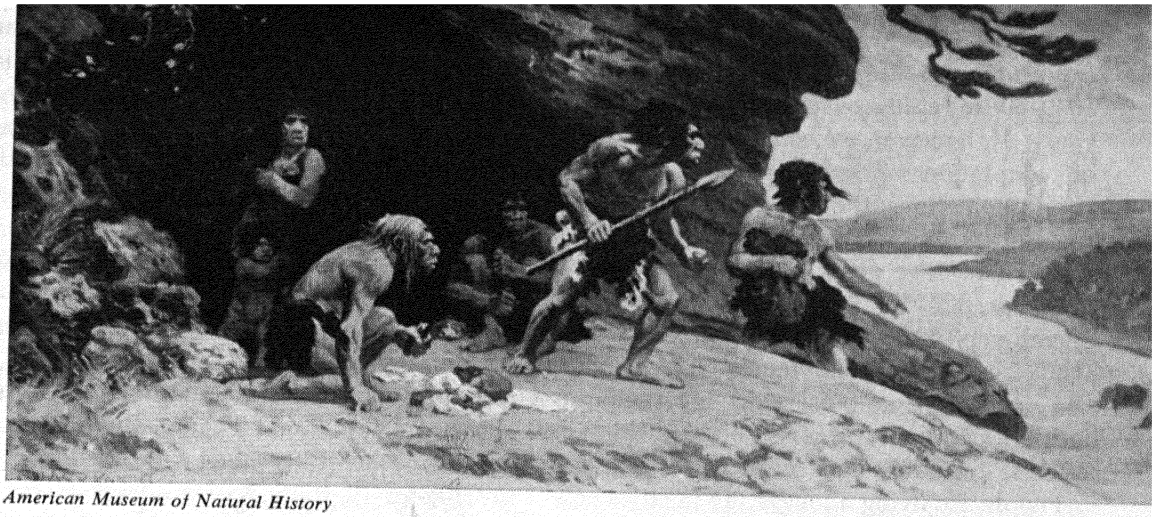
ADJUSTMENT AND COMMUNITY LIFE

Human beings have lived for many millennia in small, face-to-face groups, and for five or ten thousand years such groups have settled in particular localities. So long an experience of living in a little community implies a measure of adjustment to this type of community. The ancestors of man lived in trees without a roof, then they lived in caves or within the shelter of a lean-to. But only for the last two centuries has a part of humankind lived in cities in buildings with temperatures controlled.

The farming and hunting life was based on much physical labor outdoors. In cities many occupations are performed while seated, and power-driven machines have dispelled heavy muscular exercises.

The Cave Man in the Modern City

Survival. When Charles Darwin wrote of adaptation to environment, survival was the test. If we apply this test to cities, city dwellers seem well adapted to their new environment, since the populations of cities are increasing rapidly in numbers. Further-



American Museum of Natural History

Sanders from Black Star



133 Cities Are a New Environment

The city, which has sprung up only recently, contrasts markedly with the type of environment in which man lived for hundreds of thousands of years. There is some question about the adequacy of man's adaptation to this new environment.

more, they live a long time. The average expectation of life in the United States in 1949–50 in cities of over 100,000 was 62 years. If, however, we compare this measure of adaptation of urban populations with rural populations, the adaptation is better in rural areas, for the expectation of life there is 64 years. The death rate is lower in rural areas despite the fact that rural counties spend very little money on public health, while the cities spend much; and in cities the facilities for preserving life, such as hospitals and the presence of medical specialists, are many and excellent.

People are living a longer life in cities now than they did formerly. The expectation of life in American cities of over 100,000 population was 61 in 1939 as compared with the expectation of 62 ten years later.

The differences in the death rates of rural and urban areas are not very great, and the postponement of death through science and public administration proceeds. The urban environment may become even more favorable in the future.

Insanity. Survival is not the only test of adjustment. A person who is sick is not well adjusted. We do not have comparative statistics for cities and farms on morbidity. But in general where there are high death rates there are high sickness rates. So it can thus be inferred that sickness rates are probably higher in cities.

One type of sickness that indicates a psychological maladjustment is psychosis, the common name for which is insanity. There are about twice as many admissions to hospitals for mental disorders per 10,000 population from the cities of the United States as from rural areas. This fact may not mean that the urban environment causes more of this type of maladjustment than does the rural. For these statistics are for first admissions to hospitals and not statistics for all those who develop psychoses. Some psychotics are cared for by the family at home. There may be more of such care on farms than in city homes. Whether there is twice as much home care we do not know.

Also, it is argued, a greater incidence rate of insanity in cities would not prove that the urban environment is more conducive to insanity. It is possible that those who go to the city to live (and modern cities grow through migration as well as by births) are of an unstable type more likely to become insane, anywhere. This argument seems to rest somewhat on the assumption that psychoses are inherited. Though there is probably some hereditary factor, as is discussed in Chapter 12, there is also a large factor of experience. We do not know that those who leave farms and villages to live in cities are any more unhealthy or have any worse heredity than those who remain in small communities. The rejections for mental disorders of boys for military service in 1918–19 were in larger proportions from the cities than from the country. These youths were not in hospitals for mental disorders, though they should have been under psychiatric care. These rejection figures do not support the theory of greater home care for the country, but they do not invalidate the selection theory.

Crime. Criminals are not adapted to the laws of the community in which the crime is committed; but it is not certain that they are maladjusted for biological reasons. The criminal population may not be biological deviants. If they differ from the general population at all, it is probable that these differences lie in the direction of lower intelligence quotients, more personality difficulties, and lower incomes. Certainly much criminal behavior is a function of the regulations imposed.

There are fewer regulations in rural areas than in cities; and there are probably lower crime rates in rural areas than in cities in the Western world, though such may not be the case in India or in Afghanistan, or may

not have been true of medieval Europe, with its unpoliced highways. In the United States, crime rates are smaller in the smaller cities and towns, as shown in Table 14.

In the United States, the rates are much higher for crimes against property in cities than in rural areas. For crimes of violence against the person, there is not much difference between the rates in the cities and in the country. The rates are also higher for taking property illegally in the larger cities than in small ones.

The greater amount of crime in large cities certainly shows maladjustment, though little of it may be due to inherited or physical development factors. The maladjustment is due to cultural variations. There can be maladjustment between cultures as well as between culture and biological inheritance.

Table 14 · Urban and Rural Crime Rates, Per 100,000 Population, U.S.A., 1955, January to June*

Crimes Known to the Police	Urban	Rural
Murder	2.2	2.3
Manslaughter	1.5	2.3
Rape	6.4	6.3
Robbery	30.9	8.2
Assault	41.4	17.2
Burglary	216.1	113.3
Larceny	505.1	154.4
Auto theft	92.3	29.7

*Federal Bureau of Investigation, Dept. of Justice, *Uniform Crime Reports*, 25 (1): 7–11, 1955. The data are for 2,615 cities of all sizes. Rates are based on 1950 population.

The Times Are Out of Joint

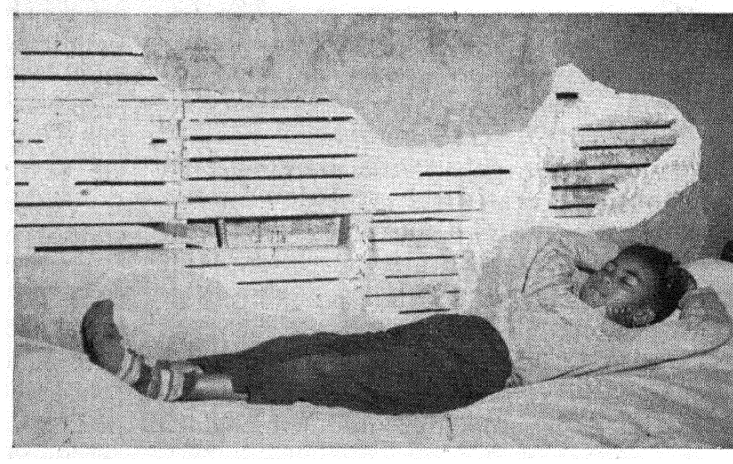
In a picture puzzle, the parts must be fitted together properly to make a unified whole. Some of the parts of the urban culture are not fitted well together. This bad assembly is due in part to the rapidity with which cities have grown and are changing. Even in Elizabethan times, Hamlet's complaint that the times were out of joint was prompted by the difficulties of sudden change.

Blighted areas. One of these out-of-joint parts is the large and growing "blighted" area. For with this deteriorated circular strip around the edges of a fringe business area, there are found deplorable social conditions. Recovery of these areas requires planning, much money, cooperative action, and government aid.

Other areas of a city need to be protected from this creeping blight. Succession occurs, and neighborhoods change in various parts of a city; and in all there is the threat of deterioration. If a local neighborhood in a city had the right by majority opinion to order repairs by particular owners, to decree against atomizing houses for rooms and small apartments or instead to acquire the property by purchase, and then exercised this right, deterioration could in some measure be prevented.

Congested streets. To meet the maladjustment of streets crowded with vehicular traffic, there are several proposals. One, for cities like New York and Chicago, is to close the streets to private automobiles. Another is to increase the facilities for underground travel and at the same time to construct parking lots below street level and to erect certain tall buildings with each floor devoted to auto parking. In the London metropolitan area, city planners have attempted to plan for whole towns outside the city. As the express highways, helicopters, and subways bring more people into trading centers, some adjustment will occur without city planning. Dispersal of merchandise establishments and some offices will occur, and people will conduct much trade without coming into the city center. The location of new markets in areas approached by wider streets and highways and with large free parking space is preventing the congestion from becoming as bad as it might be.





134 **A Slum Area**

If a slum is merely the residential area of minimal choice, all cities have slums. But if, as it is usually conceived, a slum is a blighted area with deteriorated, unsanitary dwellings, some cities like Stockholm have no slums, although lack of sufficient housing results in room-crowding in some areas. (Photos from American Council to Improve Our Neighborhoods.)

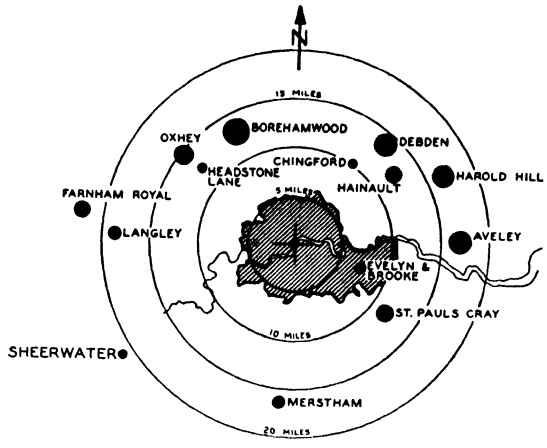
Through streets. With the enlargement of cities, the time involved in going from A to faraway B is a problem. Adequate local transportation is one of the main desiderata of city dwellers in every city and a big problem of municipal governments everywhere. The theoretical answer is more through streets with few or no stoplights. To achieve this in practice is very difficult, because of the existing layout of streets. But many cities have constructed a limited number of such expressways leading to the central business district, which deposit more people in a crowded area. Rarer are expressways across segments of cities or around cities without going through the central business district. Less difficult is the widening of highways as they approach the city.

Municipal finances. To meet the strains of growing and changing, cities require large sums of money, many billions of dollars. To raise this money, the personal and real property of only those who live in the city limits are taxed. Many people — tens of thousands of them — who live outside the city limits use the city streets and various services without paying any taxes for them, which would not be the case if there

were a tax on earnings, within the city, or if the city limits were extended to include suburbs and satellite communities. Metropolitan areas have a superabundance of different governments. In Cook County there are 400 different political units empowered to levy 600 different kinds of taxes. There are too many local governments with too little local government.

Financial difficulties arise from other sources. One source is that of taxes paid to the state from which a city gets its charter. The large city generally does not receive in return its proportionate share. Large cities are underrepresented in the state legislatures, which may amend charters or alter debt limits. In times of inflation, taxes seldom rise as quickly as prices of materials and labor, while during wars local improvements are few. In such times and under such conditions, municipalities — and large municipalities particularly — face crises of a very serious nature. For the larger city, there are more governmental functions. It costs more per capita to govern a large city than a small one.

Schools. There are many other maladjustments in the different parts of urban culture; one of these revolves about schools. As neighborhoods change, the pupils change, leading to the mixing of students from different income classes and from distinct ethnic and racial groups, which theoretically is an excellent situation in which to learn to be democratic; but there are many practical difficulties in values, such as differences in preparation by age groups, etc. More serious is overcrowding. When the birth rate rises sharply for several years, there will be an increase in school attendance six to a dozen or more years later. But too often new schoolrooms are not built. Then, if there is inflation, salaries of the professional classes do not rise as rapidly as wages or profits, and hence it becomes difficult to obtain enough good teachers. Educational costs are usually the largest item in a municipal budget, and if there is financial stringency, the schools suffer.



135 Relative Location of London County Council Development Areas Outside London

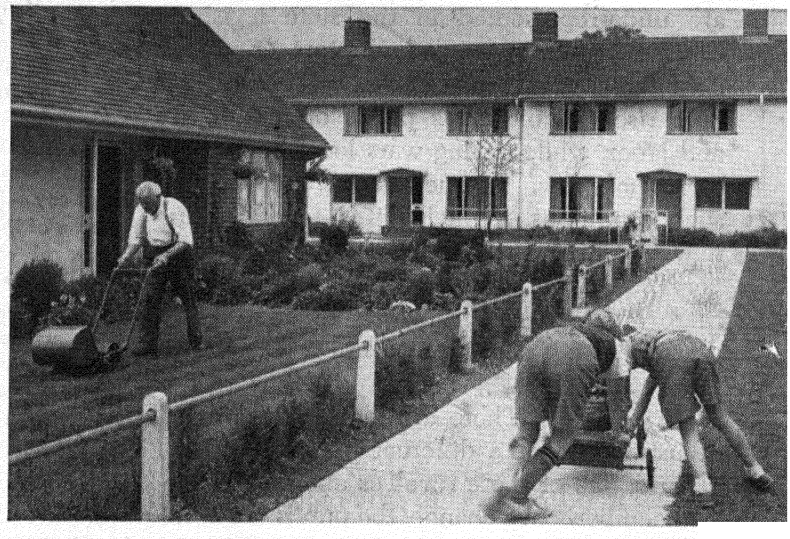
Modern city planning includes the development of satellite towns to take over certain functions of the central city — housing a part of its population, absorbing some of its industries, providing space for auxiliary services of some of its commercial establishments. While the administrative area of London lies largely within a circle with a five-mile radius, the residential settlements designed by the London County Council are dispersed over a.. area that has a radius of 20 miles and includes many towns. (Diagram from the London County Council, in W. S. and E. S. Woytinsky, *World Population and Production,* p. 133.)

The growth of large cities. The larger the city, the greater the ills of city life. Why, then, do people continue to live in large cities? It was thought in the 1930's that the very large cities might stop growing and, with the suburban movement, might even decrease. But from 1940 to 1950 nearly all large cities increased in population, even though few extended their boundaries. Thus of the 14 cities with over a half million inhabitants in 1940 in the United States, there was a gain of 9.1 per cent in population; but the land area of these cities was increased by



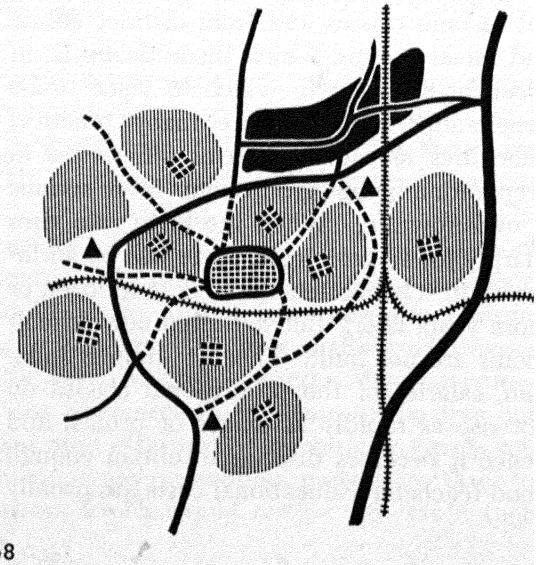
European Picture Service

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136 Old City and New Town

At the top left is a view of a street in a densely populated South London borough and at the right a view in one of the fourteen self-contained country-side industrial New Towns being built to siphon off population and industry from the big cities. The sketch below shows the lay-out of Crawley, one of the New Towns, 30 miles south of London.



The town's center is in the inner circle, where shops and public buildings are located. Surrounding it are nine neighborhood areas each with shops, schools, and park. The basic New Town pattern is one of ring-road and radials. The area in black at the top is the factory area. The community, designed for 50,000, is surrounded by a greenbelt. The people live close to their work, schools, and shops. Absentee-ism of workers is reported to be lower than in London before the factories moved out, and the people are said to like the new communities better. The New Towns are examples of what planning can accomplish. (Plan courtesy of Crawley Development Corporation.)

only 1.9 per cent. Hence these big cities increased in size and in density.

Even though the ills in large cities are great, people continue to move to them. Probably the impelling motive that attracts migrants to cities is jobs and higher pay. The increase in jobs comes basically from manufacturing, to support which there are many other jobs.

If manufacturing plants withdrew far away from great cities, the cities would lose population. But companies continue to locate their plants in cities and in the metropolitan ring around them. The reasons usually given are nearness to markets and an available labor supply with municipally provided social services. (These needs could be met pretty well in smaller cities.) Another attraction of great cities for smaller plants with various products is the accessibility to parts and semi-finished materials supplied within the city or brought in by express or freight or railroad train and truck with frequent arrivals.

This analysis implies the probable continued growth of large metropolitan areas and very likely the continued growth and increase in density of large metropolises.

Factories are still being located not too far apart in large urbanized areas, with employees seeking relief from congestion by living further away and trading somewhat nearer their area of residence. But the appeal of proximity for factories and for stores and offices is still great enough to produce very large cities.

Drastic destruction by bombs in a war, or the threat of one, might conceivably disperse the population and establishments of cities and hence reduce their size. But the first decade of the atomic bomb shows no evidence of it. Furthermore, the European cities that were greatly damaged by bombing are being rebuilt with very little more spacing and will present as attractive a target as they did before they were bombed.

SUMMARY

Ecology studies the community in relation to environment, which sets limits to human habitations and supplies the food and the elements of material culture. Culture modifies the influence of natural environment, and as culture changes, communities change. Hunters and food-gatherers, and some pastoral people, live in small, unstable communities — that is, in semi-nomadic bands, whereas agriculture encourages the development of the more stable village. With the growth of culture, communities also get bigger. The population of hunting bands is measured in tens or hundreds of individuals; that of agricultural villages may be in the thousands; and that of highly evolved handicraft communities sometimes in the hundreds of thousands. But it was the development of mechanical power applied to manufacture, transportation and communication, and supplemented by improvements in agriculture, that led to modern urban society, where most of the people live in cities, often with populations numbered in millions. Changes in technology furnish the chief key to changes in the type and structure of communities.

Developments in local transportation, especially via the internal combustion engine, have ushered in the largest local area, the metropolitan community, with places of work, residence, and trade more widely separated than ever before, but all together constituting an economic area.

The internal pattern of a community results from (a) the segregation of the population by classes or subgroups and (b) the distribution of different types of business. The segregation of residences is primarily affected by differences in income, occupation, ethnic bonds, and race. The pattern is affected also by the distribution of factories, wholesale houses, shopping centers, and offices. Recent changes are for factories to be

built outside cities with shopping centers at the periphery. The population in recent decades has been increasing more rapidly in the outer ring surrounding the city than in the city itself. But the cities have gained in population, too; and the density of population of cities has become greater.

As the community gets larger and more complex, it tends to lose its primary-group quality and to become more impersonal. This expansion results in greater freedom for the individual but in a weakening of group integration, a lack of consensus, and a poor social adjustment. However, the city is a relatively new environment to which man may in time learn to make a better adjustment. Also modern transportation and communication are decentralizing population, and it is possible that man will show a better adjustment to the new metropolitan community than he has to the city as we have known it.

QUESTIONS FOR DISCUSSION

1. How does the role of natural environment in human ecology resemble and differ from that in animal ecology?
2. How does the arrangement of a primitive Shilluk community differ from that of a modern city like Washington, D.C.?
3. Why is the method of procuring food such an important factor in human ecology?
4. What factors determined the present location of your college community?
5. How has the invention of each of the following influenced the location and structure of cities: (a) the steamboat? (b) the railroad? (c) the automobile and truck? (d) the airplane?
6. What factors are responsible for the differentiation of the city into "natural areas"?
7. Are slums an inevitable accompaniment of urban growth?
8. What are the significant differences between small and big communities?
9. What important changes are occurring in cities in the United States?
10. What is new and significant about the metropolitan community?

TOPICS FOR REPORTS

1. The comparative study of the ecology of medieval and modern cities.
2. Using a printed map, mark off (a) the residential and (b) the economic areas of your own home community.
3. Family life on the urban fringe.
4. Characteristics of communities, by size of place.
5. Blighted areas of cities and their social consequences.
6. The effects of atomic weapons on human ecology.

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A presentation and examination of the position, concepts, and methodology of the ecological school of sociology. A highly critical study, but better perhaps for its description than its analyses.

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Comprehensive, concise, precise, and informative, with extraordinary clarity in summaries and also exceptional in extensive detail. Data are restricted to communities of the United States.

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An attempt to present human ecology in a framework of values.

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A critical review of the recent literature.

HOLMBERG, ALLEN R., *Nomads of the Long Bow: The Siriono of Eastern Bolivia.* Washington, D.C.: Institute of Social Anthropology, No. 10, Smithsonian Institution, 1950.

An excellent picture of life in bands that wander from place to place in the area of the rain forests of eastern Bolivia. A rather large band that lives off the products from hunting, which is done by weapons of wood and stone, a different culture from the Eskimo, but quite as interesting.

LYND, ROBERT S. and HELEN M., *Middletown.* New York: Harcourt, Brace & Company, Inc., 1929. *Middletown in Transition.* New York: Harcourt, Brace & Company, Inc., 1937.

A widely acclaimed study of the social characteristics of a small midwestern city which is generally, but erroneously, thought to be a "typical" American small city. Interestingly written. *Middletown in Transition* describes the same city after ten years of boom and depression.

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The most comprehensive and systematic study available of the rise, structure, and problems of the total functional area dominated by the large city.

ODUM, HOWARD W., *Southern Regions of the United States.* Chapel Hill, N.C.: University of North Carolina Press, 1936.

A monumental description of the southeast region of the United States. A storehouse of statistical data, but possibly more on the order of human geography than human ecology.

PIRENNE, HENRI, *Medieval Cities.* Garden City, N.Y.: Doubleday & Company, Inc., 1956.

An excellent account of the origin of cities in Western Europe, written by a master of the subject, though there is not much about social life in these early cities. It is a history of social forces and processes, of causes and effects, with the great man omitted.

WEST, JAMES, *Plainville, U.S.A.* New York: Columbia University Press, 1945.

Small villages, like farming communities, are strange to college students, most of whom now come from cities. The sociologist sees them as social systems and points out the significance of relationships that college students from villages have taken for granted. Plainville is a midwestern community in the United States.

WISER, WILLIAM and CHARLOTTE, *Behind Mud Walls,* third printing. New York: Agricultural Missions, 1951.

An old book but still a standard about life in a village of India, told in the language of the general reader rather than in the concepts of modern sociology such as status, role, norm, system. John Embree, *Suye Mura* (Chicago: The University of Chicago Press, 1939), gives an account of a Japanese village; Hsiao-t'ung Fei, *Peasant Life in China* (New York: Oxford University Press, 1946) describes village life in China; Robert Redfield, *Tepoztlan* (Chicago: The University of Chicago Press, 1946), tells of a Mexican village; and Hamed Ammar, *Growing Up in an Egyptian Village* (London: George Routledge & Sons Ltd., 1954), deals with the Arab world.

14

The Distribution of Population

No matter what kind of work the reader plans to go into, whether it be business, or farming, or a profession, he or she should be interested in the distribution of population. For the markets for merchandise, services, land, and agricultural products depend on where the population is to be found. So, too, the market for transportation. Few commercial air lines fly over the top of the world, for there are not enough passengers living in the Arctic, though the polar route is the shortest between western United States and Northern Europe.

On the other hand, dense populations on farming lands mean small farms, a low plane of living, and limited purchasing power per capita.

Furthermore, large populations consume natural resources and sometimes exhaust them.

The distribution of population has international significance, too. For masses of people represent military might, actual or potential, in a world where the struggle for power seems endless and inevitable. China has a population of six hundred million, India a third of a billion, and Russia's population is greater than that of the United States.

In various other ways, to be indicated later, the distribution of population is of significance.

WORLD DISTRIBUTION

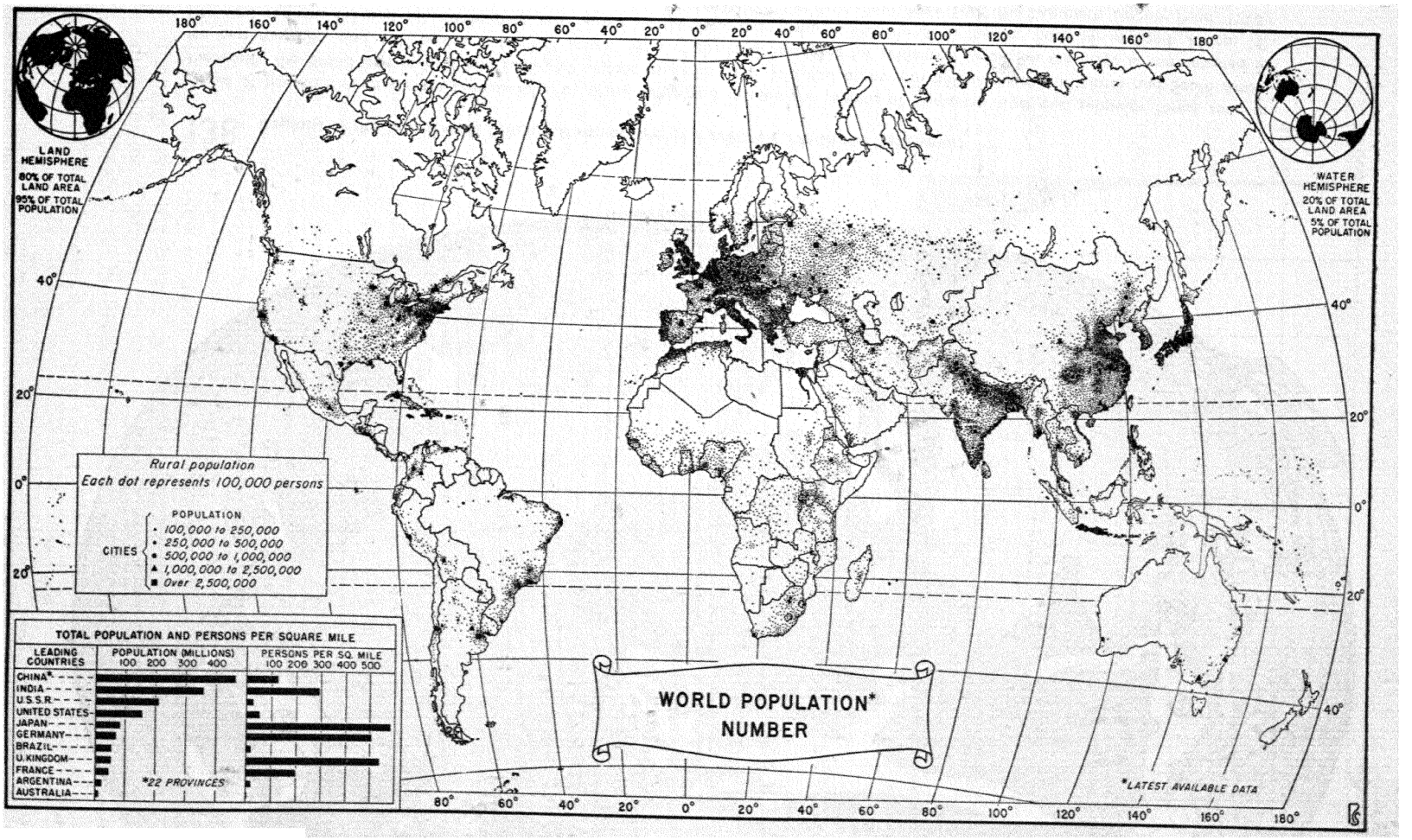
Population is not spread evenly over the land surface of the earth. A traveler may go for days through the cold north of Canada or Siberia without seeing a human being. Nor are human beings to be easily seen in the jungles of Brazil or the deserts of North Africa. But in parts of Southeast Asia there appears to be "standing room only."

Where the peoples of the world live, sometimes crowded but often scattered, is shown in Figure 137. Much of the world's population is concentrated in three areas: India, Ceylon and Burma; Eastern China and Japan; and Europe. Or expressed even more briefly, people are found mainly around the rim of the North Atlantic Ocean and on the Asiatic border of the Pacific Ocean. There are small concentrations in the northeastern part of the United States, on the islands of Southeast Asia, and in spots in Latin America. There are very few clusters of population in the Southern Hemisphere. Over most of the surface of the earth the density of population is low, especially in the dry cold north of Asia and America, and in the vast interior of South America, Africa, and Australia.

If we ask why there is this unequal distribution, the answer is found in geography and in culture.

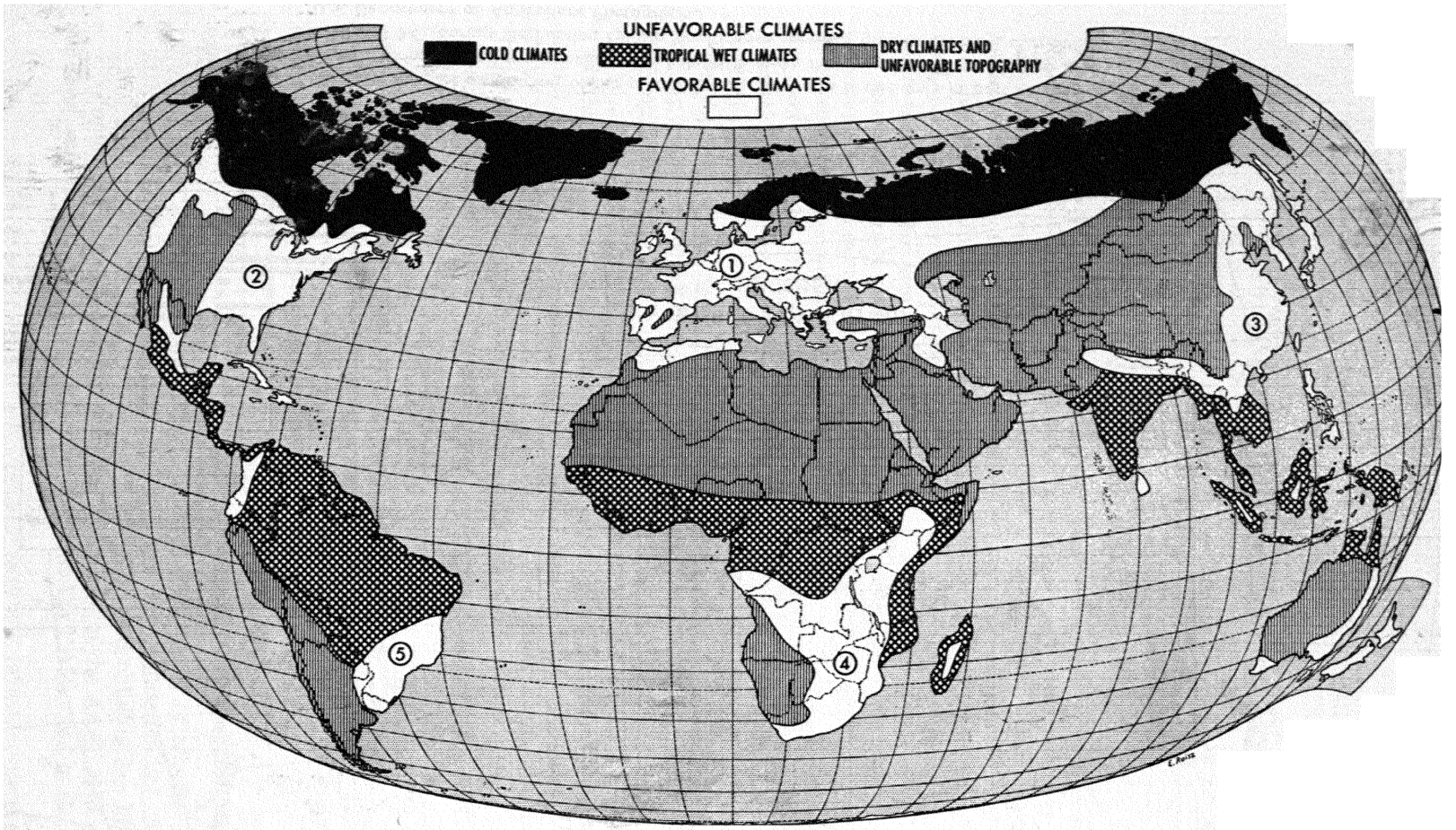
Geography and Population

Extremes of climate and topography limit the habitation of mankind. Men, women, and children can live almost everywhere — in the Arctic cold of the far north as do the Eskimo and in the hot humid rain



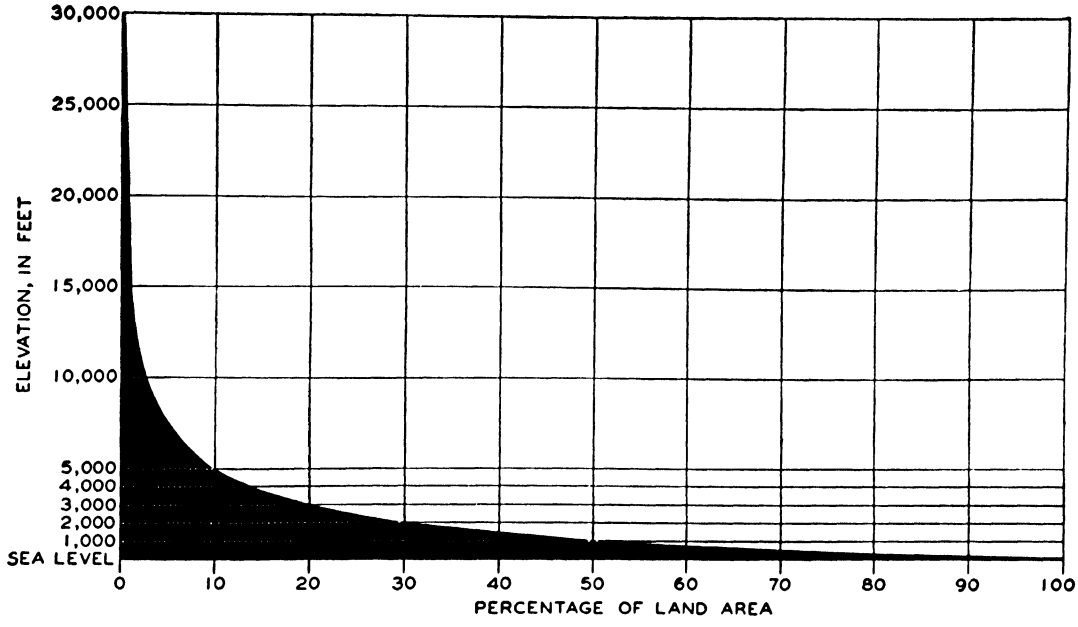
137 World Population, About 1950

The very unequal distribution of the population of the world is due only in part to climate. Manufacturing as well as agriculture has helped to make the congested spots. A map made in 10,000 B.C. during the hunting culture would have shown a greatly different distribution. (U.S. Department of Agriculture Photograph.)



138 Regions of the World with Climate Unfavorable or Favorable for Dense Settlement

Areas of the world with climate unfavorable for dense settlement include the regions of perpetual frost and subpolar forest zone in the north, the broad belt of arid and semi-arid regions in Africa and Asia and areas with similar climates in North and South America and Australia, and wet regions in tropical zones. Most of the land favorable for settlement (white on the map) is concentrated in five vast regions: (1) and (2), confronting each other across the North Atlantic Ocean; (3) in the Far East; (4) in South Africa; (5) in South America. (From W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953,



139 **Percentage Distribution of the Land Area of the World by Elevation**

About half the land surface of the earth is not more than 1,000 feet above sea level; more than three-fifths is below 2,000 feet, four-fifths below 3,000 feet, and as much as nine-tenths below 5,000 feet. Highlands and mountains cover only one-tenth of the land surface. The area of high mountains does not exceed 1.5 per cent of the land surface of the earth and is less than 0.5 per cent of the total surface of the globe. (From W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953, p. 13.)

forests of Eastern Bolivia as do the Siriono. This they can do by virtue of the aid culture gives them. They can hunt, fish, cultivate plants, build fires, provide shelter, and make clothing.

Though human beings can live almost anywhere, thanks to their culture, they cannot live everywhere in large numbers. Extremes of heat and cold, excessive dryness and moisture, rocky terrain and high altitudes are unfavorable to plant and animal life which masses of men need for food. A few men can live where masses of men cannot.

A climatic map of the world, such as that in Figure 138, shows that, in general, in the places where the climate is unfavorable or hostile (especially to plants and animals), the population is relatively sparse, as in the dry climates of Siberia. In some of the hot humid climates, as in Southeastern Asia, which appear more uncomfortable to dwellers in the temperate zones than to the Southeast Asians, there are dense populations. This area has an abundant food supply. Some hot climates permit two or more crops per year.

The synchronization of the map of climate in Figure 138 and the map of population distribution in Figure 137 is not perfect, since the map of climate does not show altitudes, deserts, rocks, and forests.

The altitude limits of human habitation in the temperate zones of Europe and the United States are around 8,000 feet, but some 12,000 or 15,000 feet in tropical areas and in Tibet.

While a climatic and topographical map would permit one to guess the highly populated areas and the sparsely peopled regions of the world, such a map would hardly lead

us to expect that 68 per cent of the population of the world would be crowded into 8 per cent of the land. This is possible because of the fertility of the soil, the presence of minerals, and routes of transportation — all made utilizable by inventions.

Distribution by Continents

The Old World and the Northern Hemisphere have the largest proportions of the population. The Southern Hemisphere has one-third of the land of the world (18.1 million square miles), but only one-tenth of the population (240 million). These proportions are seen graphically in Figure 140, which shows two distorted maps, one drawn to the scale of land area and the other to the scale of population. These figures also portray population and land area by countries which may be roughly grouped by the eye into continents.

Asia is the big continent with over one-half the population of the world, a fact to be remembered as airplanes and radio increase the contacts of the different parts of the world and speed the diffusion of culture. Europe has not quite one-fourth of the world's population. The land maps of Europe and Asia together hold 78 per cent of all the people. This distribution is not without interest to those who market goods and to those countries that will make military alliances in the future. If there were a democratic one-world government, the votes would lie in this great area.

The distribution of population by continents is shown in Table 15. The Americas had only 2.4 per cent of the total population in 1650 but 13.2 per cent in 1950. Africa had between one-sixth and one-fifth of the people of the world in 1650 (18.3 per cent) but less than one-twelfth in 1950 (7.9 per cent).

The distribution will be different in another 300 years. Perhaps the Americas and the Southern Hemisphere will have larger shares. There will still be limitations of food, unless we have acquired unlimited mechanical energy and can produce food artificially from carbon dioxide, water, sunlight, and chlorophyll.

Where the Different Races Live

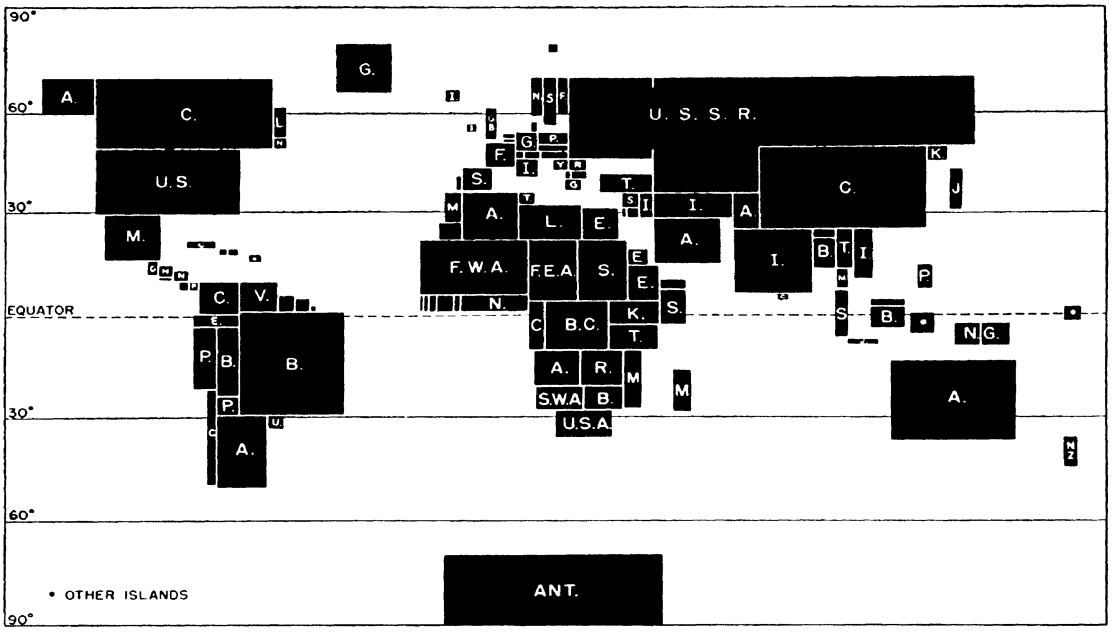
The whites are more scattered, and the Negroid races more localized. The distribution of races with the whites so widely dispersed is contrary to the expectations of a half century ago when there was concern in the United States over "the rising tide of color." The color tide has not swept as far as the white tide. The concern about races

Table 15 · The Population of the World by Continents, 1650 and 1950*

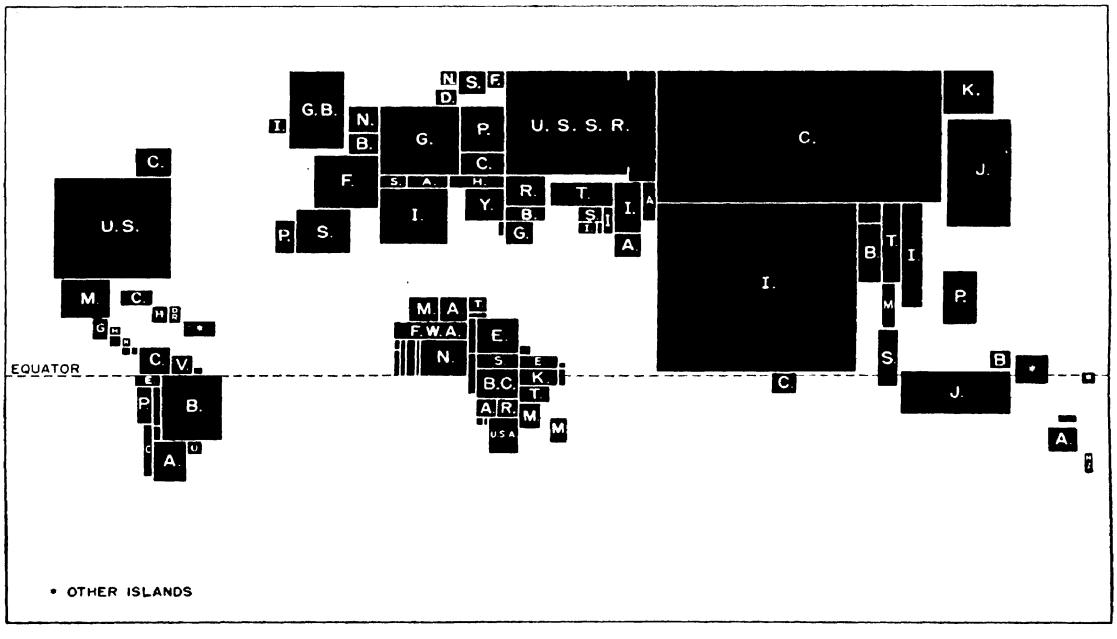
CONTINENT	NUMBER (MILLIONS)		PER CENT	
	1650	1950	1650	1950
North America	1	168	.2	6.7
Middle America	6	51	1.1	2.1
South America	6	111	1.1	4.4
Europe	100	595	18.3	23.8
Asia	330	1368	60.6	54.6
Africa	100	198	18.3	7.9
Oceania	2	13	.4	.5
TOTAL	545	2504	100.0	100.0

* United Nations, *Demographic Yearbook*, 1953, 1956.

A. DISTRIBUTION OF LAND



B. DISTRIBUTION OF POPULATION



140 Distribution of Land and Population (1949) by Continent and Country

Comparison of the top map, showing the distribution of the world's land, with the bottom map, which shows the distribution of the world's population in 1949, makes it clear that Europe has to squeeze a great many people into a very small space, and that Asia, despite its large land area, still ranks far higher in population density than Africa, Australia, and the Americas. (Map prepared by the French Institut National de la Statistique et des Études Économiques and reprinted here from W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953, p. 42.)

has perhaps lessened since then, for many of the so-called racial traits are now known to be not inherited but acquired by virtue of the influence of culture. Still, physical differences do exist, though the whites are not white like a white piece of paper, the yellow races are not the color of an egg yolk, nor are the blacks as black as black shoe polish. Some of the black inhabitants of India belong to the white race; there are brown Negroes in Africa, and the red Indian is classified with the yellow races. Though the racial chromatic chart is confused, and though racial and cultural traits have not been unscrambled to the satisfaction of everyone, color is important, as is also the behavior of races. Both color and behavior are social facts as well as biological. There is a rising voice of color in world affairs, even though there is at present no rising tide of color.

The distribution of races. The distribution of races may be indicated only in broad outlines. The white races, which include dark-skinned peoples of India, occupy also Europe and North and South America, in part. They number perhaps about 1,300 million. There are 500 million Europeans living in Europe, and 200 million living in other parts of the world, mainly in North America and Australia. The remainder of the whites are largely in India, Asia Minor, and northern Africa.

The Negroid peoples are the smallest in number of all races, numbering probably about 240 million, of whom 15 million live in the United States. The principal home of the Negroid peoples, Africa, remains the dark continent, although there are some whites in the north and in the extreme south.[1] Before the coming of the whites, Australia was peopled by a black people, as is still the case in the Melanesian Islands. There is a scattering of Negroes in the Caribbean islands and in local areas of South America, due to migration in historical times.

The Mongoloid races occupy Asia, with the notable exceptions of India, Iran, Asia Minor and the Arab countries. The peoples popularly described as having brown and red skins are rightly classified with the so-called yellow-skinned peoples, for many physical measurements other than skin color are used in classifying races. The brown peoples occupy the islands south of Asia and many of the scattered islands of the Pacific, while the so-called red-skinned peoples, some 20 or 25 million in number, with many more mixed bloods, live in the Americas. The Eskimos, who live in the lower parts of the Arctic, are also Mongoloid, but in comparison their number is negligible. Altogether the Mongoloid races number slightly over 800 million persons.

MIGRATION

Push, pull, and means of transportation. If human beings at one time were found only in the Garden of Eden or in Southeast Asia, how then did they come to live in all parts of the world? Obviously by moving outward to new lands. Wandering away from the homeland, or the more purposeful movement called migration, is the method of settlement. Once settled, the quantitative distribution is affected also by relative increases or decreases in numbers through births and deaths.

The factors that cause people to migrate may be summarized under the terms, *push, pull,* and *means of travel.* A land flowing in milk and honey beckoned the ancient Jews, but there was also a push coming from the cruelty of the Egyptians. America was a promised land to the oppressed of Europe. It was a land of hope where immigrants might turn over a page in the book of life and start anew. The principal attractions here were probably economic opportunity

[1] It is to be noted also that all the Negroes of Africa are not equally dark-skinned; many Africans unmixed with whites have a brownish-colored skin.

and religious and civil liberty, whereas the push came from such situations as the potato famine in Ireland, the religious oppression of the Huguenots in France, and the revolution in Germany. It is thus seen that there are particular cultural or historical conditions that cause a redistribution of peoples.

The pull exerted by the United States has been measured by a coefficient of correlation between waves of immigration and periods of prosperity in this country. The correlation is much higher than it is between the waves of emigration from Europe and hard times in Europe.[2] It would thus seem that often the attraction of the new home may be greater than the dissatisfaction with the old, as measured by mobility. This point is important because of the claim that population pressure makes for war. If the pull is greater than the push, it may be that the love of booty is a greater incentive to war than hardships at home. Certainly some densely populated countries, such as China and India, have been peaceful, whereas less densely populated Europe and America have frequently engaged in wars.

When migration is viewed over a long stretch of time, it is seen that the volume or rapidity of movement depends on the available technology, as for instance horses, sailing vessels and steamboats. Other factors are also significant, such as the accessibility of new land and the absence of restrictions on mobility. But though the latter no doubt played a part in the migration of 30,000,000 Europeans to the United States in less than a century, this great redistribution of population is not conceivable without large-sized steamboats.

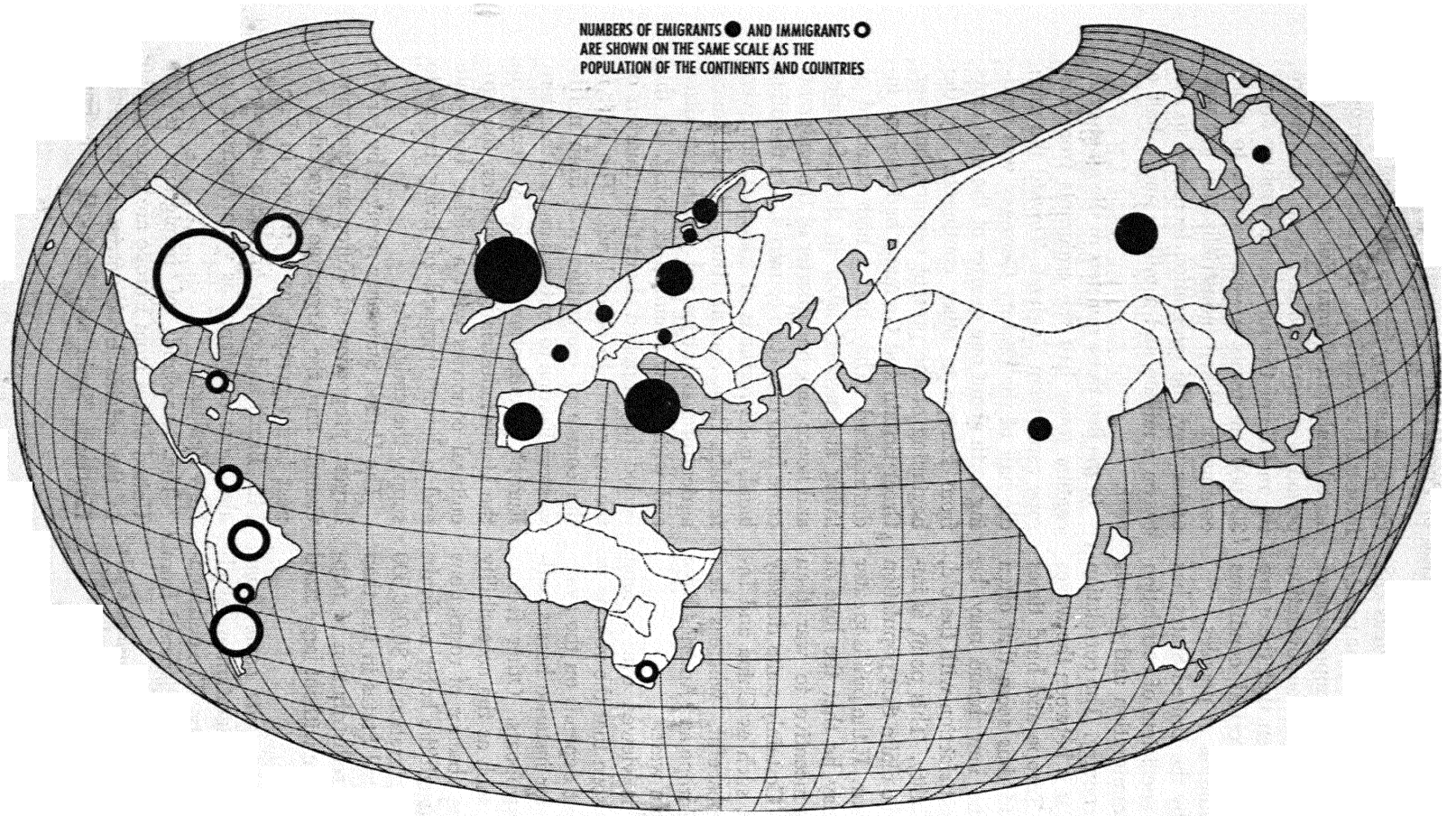
Where the immigrants come from. Accurate statistics about migration are available only for the past century. The outstanding movement has been the dispersal from Europe caused by factors associated with the industrial revolution. The total intercontinental emigration from Europe during this period is summarized in Figure 141. Before the middle of the nineteenth century about 300,000 emigrants a year crossed to other continents. When industrialization got well under way, the emigration increased to between a million and a million and a half a year.

In the first three quarters of the nineteenth century, over half the emigrants from Europe came from England. Toward the middle half of the century Germany was sending forth about one quarter of the emigrants from Europe to other continents. By the beginning of the present century, however, Great Britain and Germany had become industrialized. They had a high standard of living and needed labor in their factories, and hence only one quarter of the emigrants came from these two countries. On the other hand, good methods of transportation were reaching Italy, Austria-Hungary, and Russia, agricultural countries not yet industrialized and with a low standard of living. In this period they supplied about three quarters of the emigrants to other lands. The shift in the course of emigration was from northwestern Europe to southern and southeastern Europe. Emigration practically ceased in the highly industrialized countries; the agricultural countries with a higher birth rate and a lower standard of living began to supply the emigrants.

The United States has received by far the largest proportion of European emigrants. Canada and the Argentine have taken the next larger portion, as is shown in Figure 142. Brazil and other American lands were also large recipients, as were Australia and New Zealand.

The homelands of immigrants to the United States from Europe are quite similar to the origins by countries of emigrants. However, Spain and Portugal contributed

[2] Harry Jerome, *Migration and the Business Cycle* (New York: National Bureau of Economic Research, 1926), p. 204.



141 **Intercontinental Emigration and Immigration, 1846–1945**

Continents and countries are shown on this map on a scale proportionate to their population about 1950, and the numbers of migrants who have left or entered a country since the middle of the nineteenth century are shown on the same scale as the 1940 population. The circle in central Europe refers to Germany, Austria-Hungary and countries that were part of the Austro-Hungarian Empire before World War I. The figure shows, for example, that the number of emigrants who left Great Britain and Ireland from 1846 to 1945 amounted to about 40 per cent of the 1940 population of this area, and that a similar percentage of immigrants (from all countries) entered the United States during this period. (From W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953, p. 73.)

their emigrants chiefly to South America, and rather large proportions of the British went to British possessions in America, Africa, and Oceania. The twentieth-century immigrants to the United States have come largely from Mexico, Italy, and southeastern Europe.

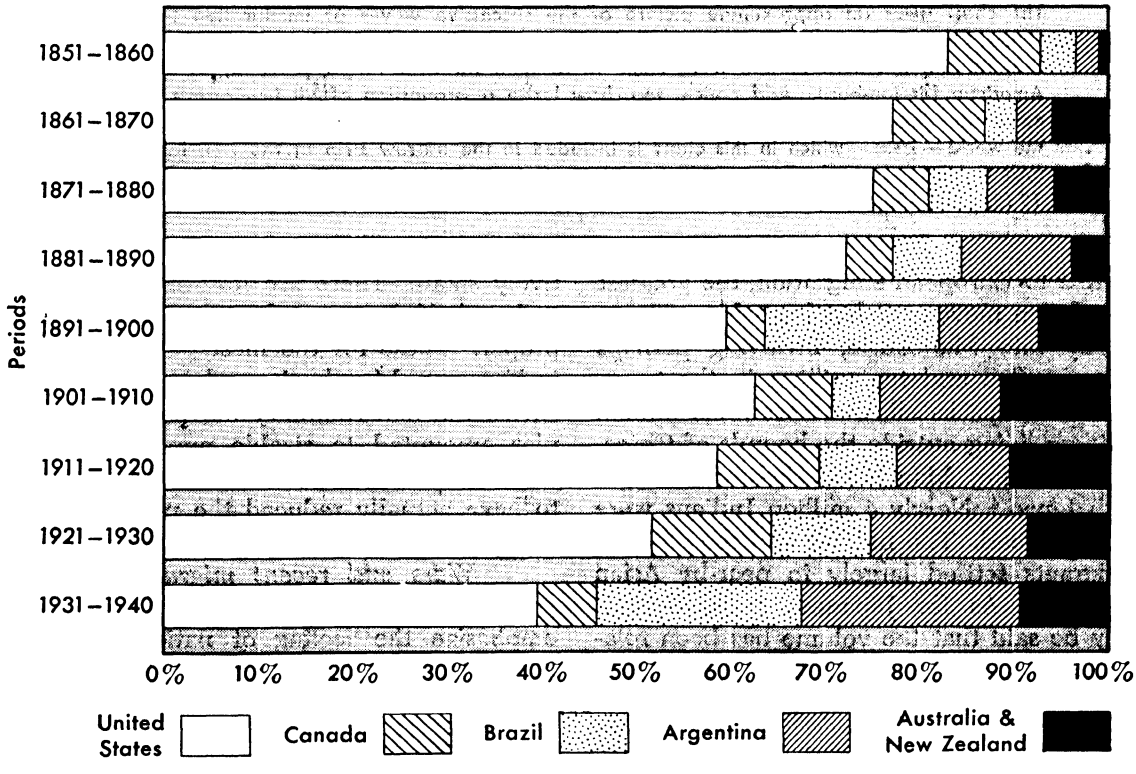
Have these new immigrants changed radically the racial composition of the United States? The inhabitants of this country in recent years have been concerned about what the racial nature of the United States should be. The Japanese, a different race from the whites, have been prevented by law from migrating to California. There has been some concern on the part of the legislative representatives about the infusion of peoples of a different racial subtype from southern and southeastern Europe, especially because the birth rate of the newcomers is high as compared to that of the native stock.

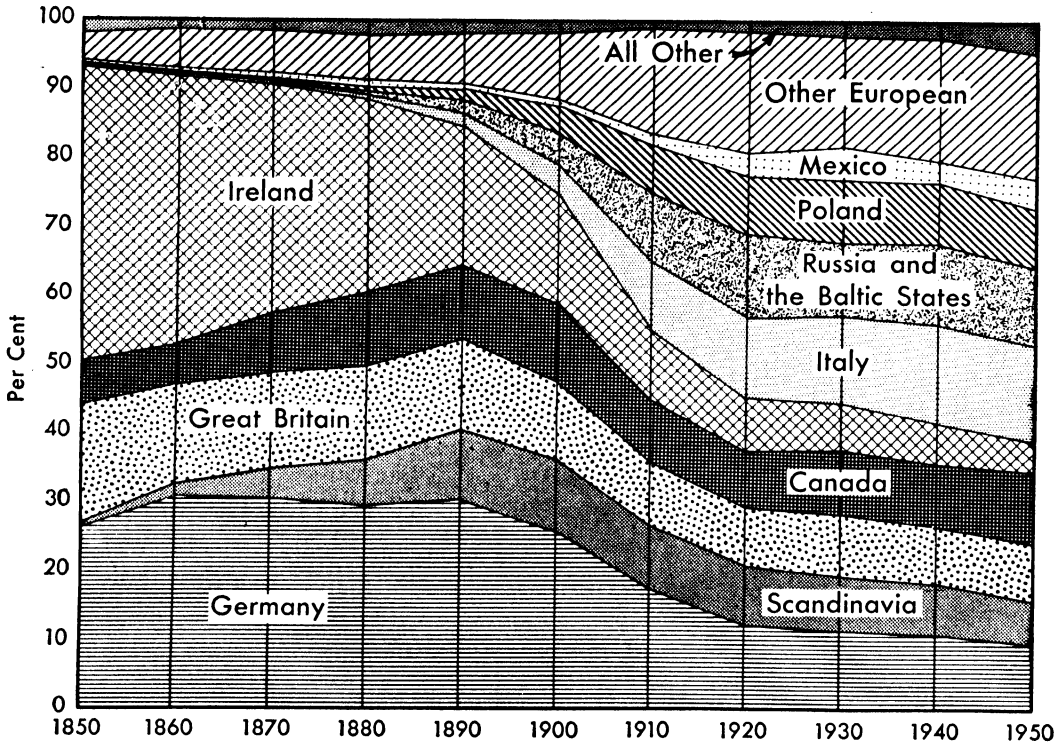
With their high birth rates these immigrant racial types have for a time increased more rapidly than the native stock in America. Despite this fact, the descendants of the immigrants from northwestern Europe far outnumber the newer immigrants. Over 80 per cent of the population of the United States comes from stocks of northwestern Europe.[3] The United States, then, has much the same composition of population by racial types as has northwestern Europe, except for the 10 per cent Negroes, the few Indians, and the occasional Oriental and Mexican. The historical trends in immigration to the United States are summarized in Figure 143.

[3] A. M. Carr-Saunders, *World Population* (Oxford: The Clarendon Press, 1937), p. 165.

142 Number of Immigrants Entering Selected Countries, by Decade, 1850–1940

The influence of legislation restricting immigration into the United States, which occurred after World War I, is apparent in this chart. (Data from W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953, Table 36, p. 77.)





143 **Percentages of the Foreign-Born Population of the United States Who Were Born in Specified Countries, 1850–1950**

The chart gives an approximate picture of the successive waves of immigration to the United States from decade to decade during the past century. Notice how, from 1890 on, Eastern and Southern Europe have come to account for ever larger percentages of the American foreign-born. And notice, too, how large a proportion of all immigrants have come from Europe, how very few have come from the most heavily populated continent in the world — Asia — which in this chart is included in the narrow strip at the top, labeled "All Other." (Data for 1850–1940 from *Historical Statistics of the United States, 1789–1945*, p. 32; for 1950, from *Statistical Abstract of the United States*, 1956, p. 36.)

Next to European emigration, the greatest population movement has been from China, chiefly into Manchuria, involving perhaps between five and ten million in the twentieth century. In all, there were 9.5 million Chinese living outside the bounds of China, not including Manchuria, before the war with Japan.[4] Nearly 4 million Indians were living abroad. The Indians and the Chinese emigrants settled largely in near-by Asian countries. As for Japanese emigration, it may be said that the volume has been relatively small. There are less than a million and a half Japanese living outside Japan proper. These for the most part are found in Formosa, Manchuria, and Hawaii. From Africa the non-voluntary movement of peoples amounted to sizable numbers during the slave trade. This movement is supposed to have actually reduced the population of Africa, but no reliable figures are available.

Wars and recent migrations. Wars are conflicts between nations, hence they emphasize the feeling of nationalism and hostility toward the enemy people and their

[4] *Ibid.*, pp. 57–58.

allies. These attitudes result in restricted migration of some groups and also of forced migrations of others. Thus after the First World War immigration to the United States was restricted, while from Turkey the large number of inhabitants of Greek origin were forced to return to Greece. After the Second World War, many Germans were expelled or transferred from lost territories and enemy countries.

These nationalistic feelings were not without influence on the migration of Jews into Palestine. Because of anti-Semitic persecutions in the early and middle thirties, Jews moved into Palestine at a rate of some 40,000 a year; and following the Second World War and the creation of the state of Israel in 1947, the immigration was 119 thousand in 1948, and 239 thousand in 1949. Since then, the migration has diminished greatly. The early migrations came from Southeastern Europe. In 1951 over one-half came from Asia, and recently the majority have come from Africa.

In India a great movement of peoples was stirred up by the fighting at the time of the partition into Pakistan and India. The transfer of peoples was much greater than the transfer of Jews to Israel. Probably some 5 million non-Muslims left Pakistan for India, and about the same number of Muslims went from India to Pakistan.

The free movement of peoples is restricted. After the First World War, barriers to the free movement of peoples between countries were quickly and widely erected, although there were exceptions, as in France.

144 Population Shifts in Europe and the U.S.S.R. Produced by World War II

World War II, like the wars in ancient times, was followed by forced movements of peoples. The largest movements were of Germans from eastern Germany to make room for Polish and Russian settlers. The map below shows details of other displacements, deportations, and expulsions and replacements by other migrants. The expulsion of families from their communities, homes, farmlands, friends, and schools causes great hardships, although to many the hardships are compensated for by the appreciation of peace. (Redrawn from Eugene M. Kulischer, *Europe on the Move: War and Population Changes, 1917–1947,* New York, Columbia University Press, 1948.)

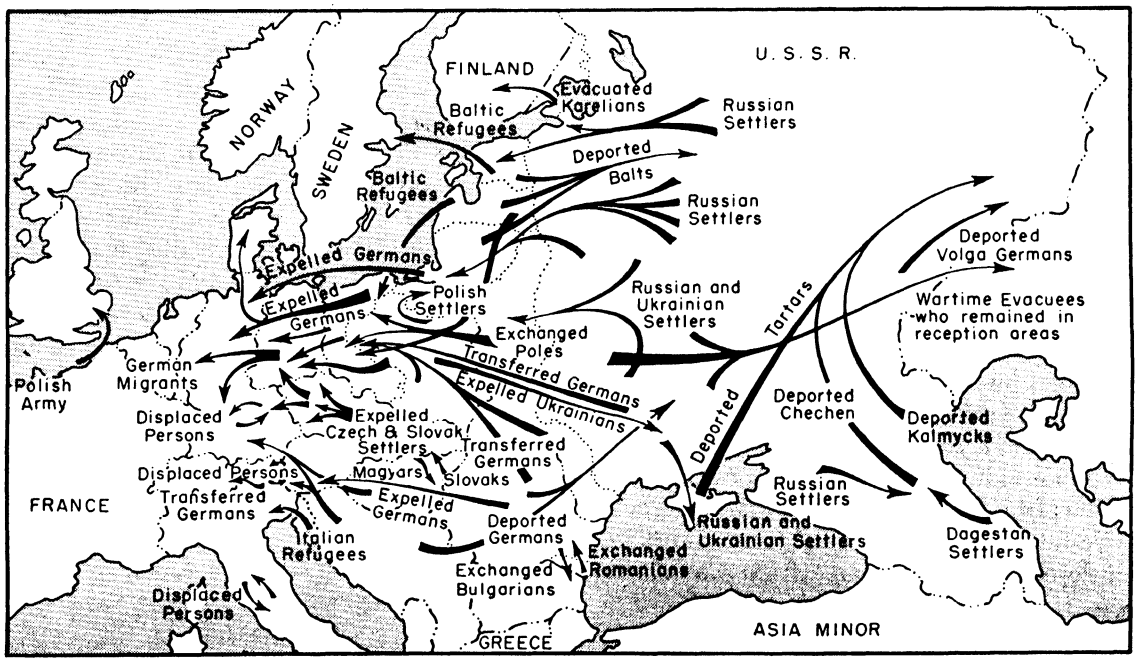


Table 16 · Numbers of Immigrants to the United States, 1941–53, from Different Continents and Selected Countries*

Continent or Country	Immigrants (Thousands)
Europe	1,047
Americas	541
Asia	53
Australia & New Zealand	16
Oceania	9
Africa	10
Britain	185
Ireland	38
Scandinavia	42
Germany	446
Italy	86
Canada	267
Mexico	93
West Indies	71
Central America	29
South America	36

**Statistical Abstract of the United States, 1956*, p. 95.

The United States made its first restriction in 1921, and this legislation has been amended several times since. The restriction was aimed at countries outside the Americas and particularly at the countries of southern and southeastern Europe. In 1930 and thereafter, 150,000 entries per year were to be prorated among the different countries according to the number from those countries or their descendants in the United States in 1920. After the Second World War permission for some 350,000 displaced persons to move to the United States was granted. But the administration of the act has not resulted in much immigration beyond the quotas permitted.

In recent years (1941–1953) the average number of immigrants per year to the United States from all countries was 129,000, nearly two-thirds of whom came from Europe. A little over one-sixth came from Canada and 5 or 6 per cent from Mexico, as is shown in Table 16. The "Golden Age of Migrations" has come to a close. The period of the great migrations was the last three quarters of the nineteenth century and the first quarter of the twentieth. During this time 65 millions left Europe to find homes elsewhere, largely in the Americas. This was a period of "*laissez-faire*" in population. Now governments control the flow of population as well as of money and of goods.

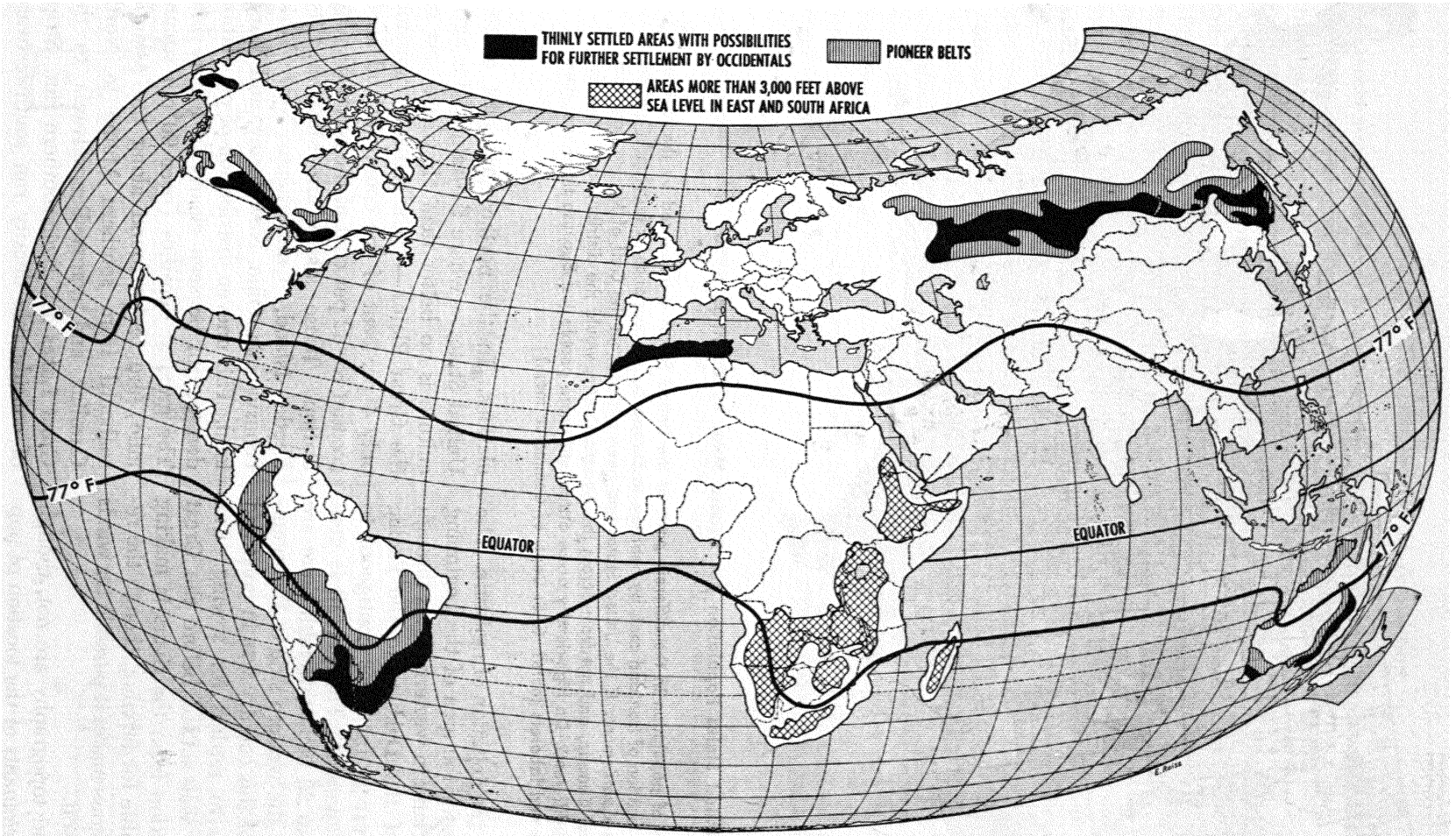
There are still "pioneer belts" for settlement in various parts of the world, as shown in Figure 145, in Canada, Siberia, Alaska, South America, Africa, and Australia. Their settlement is affected by other influences than governmental action. For Europeans to migrate today to pioneer areas, capital is needed, and more than the meager equipment of a century or two ago. Today settlers need a drugstore, a radio, a dentist, a newspaper, a gasoline station, and a department store, if there are none where they are going.

POPULATION DISTRIBUTION IN THE UNITED STATES

Density

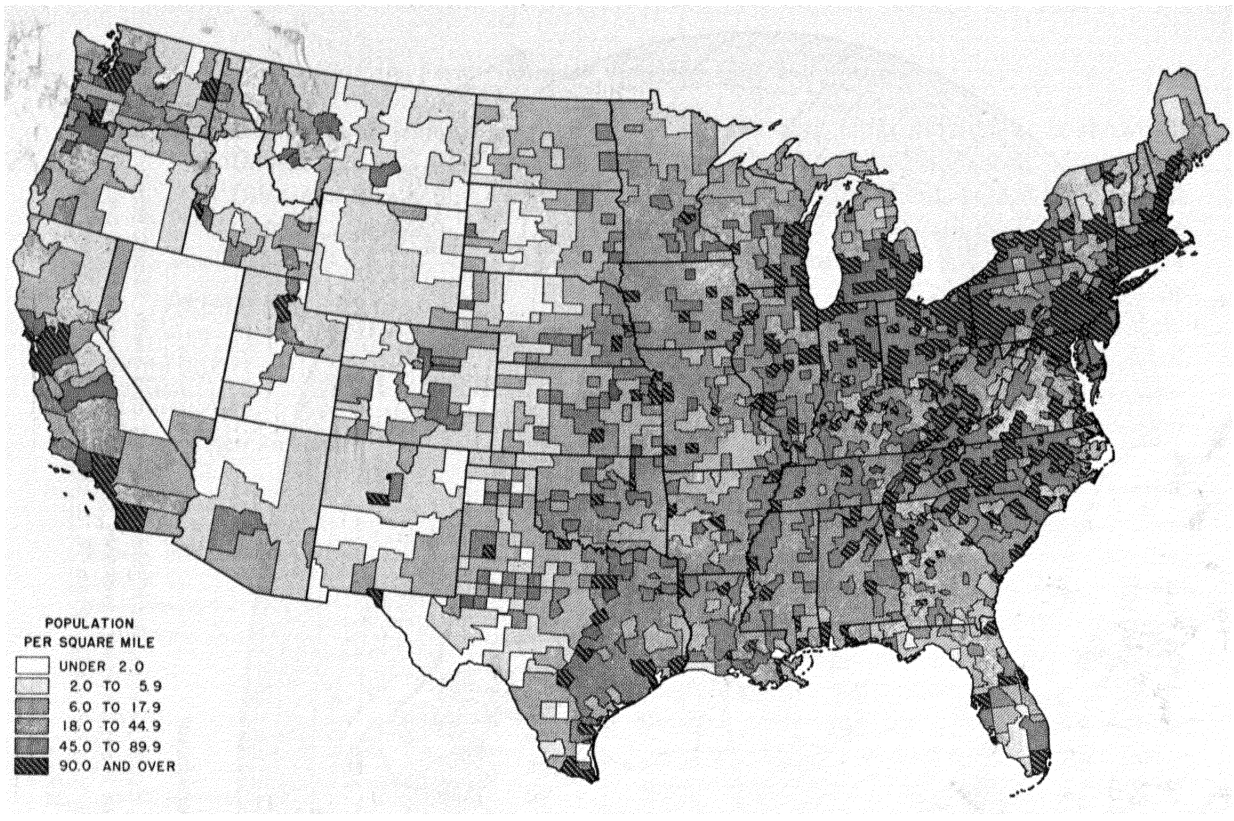
The unequal distribution of population has social implications. About two-thirds of the population of the United States live east of the Mississippi River, where there is only about one quarter of the land; and 73 per cent of the land, that portion west of the Mississippi, has only 35 per cent of the population. The states east of the Mississippi have twice as much weight in electing a president of the United States as do the states west of it. It is in these eastern states that the greatest market for the sale of goods is to be found.

The causes of this unequal distribution are not to be found in temperature, for all parts of the United States have a pleasant temperature. The climatic factor is rather



145 Outlook for International Migration: Areas of Potential Settlement

The most promising areas of possible new settlements are in Canada, South America, the highlands of East and South Africa, interior Asia and Australia. Any appreciable expansion of population in these areas, however, presumes considerable investment of capital, improvement of means of transportation, and, in some cases, changes in land ownership. (From W. S. and E. S. Woytinsky, *World Population and Production*, New York, The Twentieth Century Fund, 1953, p. 108.)



146 **United States Population per Square Mile, by Counties, 1950**

The density of population in the different parts of the United States is influenced by the lack of water, the location of iron and coal, by nearness to Europe, by the existence of farmlands, and by the history of settlement. If the United States had been settled from the Gulf of Mexico and from south-central Canada, and not from across the Atlantic Ocean, would the distribution of densities have been different? Do high-density areas attract still more people just because there are more purchasers and laborers there? (U.S. Dept. of Commerce map.)

in shortage of precipitation of moisture. The climate is dry for the area of the beginning of the Great Plains in western Texas through the middle of the Dakotas to the Pacific Coast states, except for areas contiguous to the Rocky Mountains. The rainfall is generally less than 20 inches, though there are exceptions on the western side of the mountains. Much of this country was in grass and not attractive to settlers for sowing. The Pacific Coast was settled before the Great Plains. Irrigation from the rivers is making the land suitable for farming, though the removal of the grass makes it possible for winds to waste the soil.

Climate and topography are not, though, the sole determinants of the location of populations. In the northeastern part of the United States — where the rainfall for agriculture is no better than elsewhere east of the Great Plains — eight states, comprising only 4 per cent of the country's land area, account for 32 per cent of the country's population. These states are Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, Ohio, New Jersey, and Maryland. This uneven distribution of population density can be seen clearly in Figure 146. The greatest densities (over 90 per square mile) are to be found along the Atlantic seaboard from southern Maine to North Carolina and across Pennsylvania to the Great Lakes and their southern rim. Strips of considerable density run southwestward

on either side of the Appalachian Mountains. This is the area most likely to be bombed in a nuclear war.

Although geography is certainly not the only explanation for this concentration of population, nevertheless two geographical factors do account for some of it: (1) coal and iron, which have been in great demand since the Industrial Revolution; and (2) the waterways that connect with the markets and homeland in Europe.

History may also be a factor in creating the density. Before the War of Independence from Britain, the population of the United States was within a hundred miles of the Atlantic coast, and largely north of North Carolina. These settlements may be seen as markets, which, once started, continue to grow as long as transportation lines and food supplies are available.

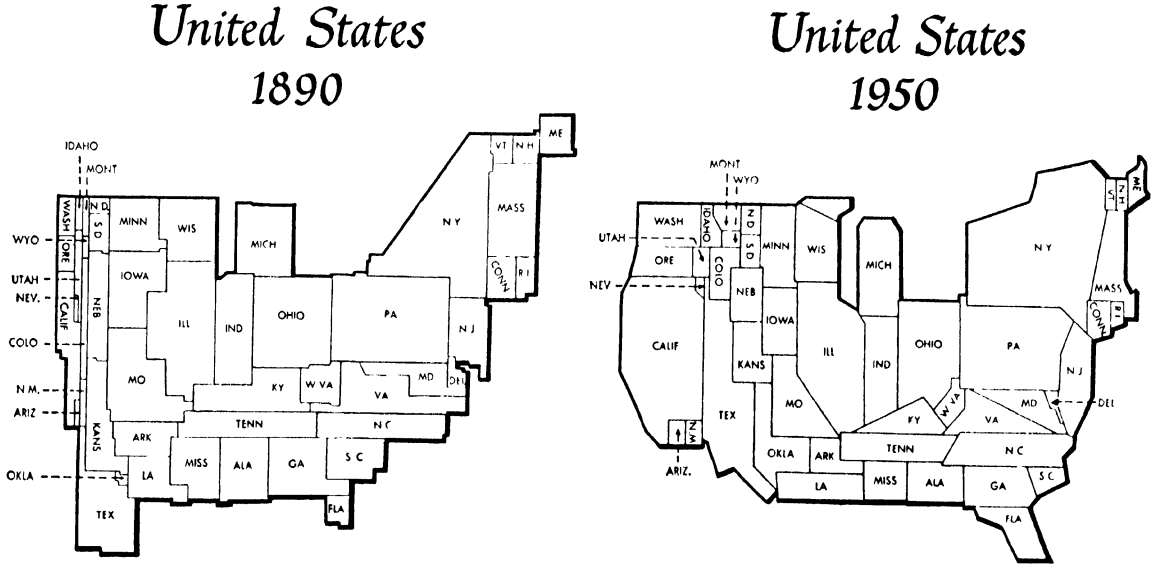
Migration Within the United States

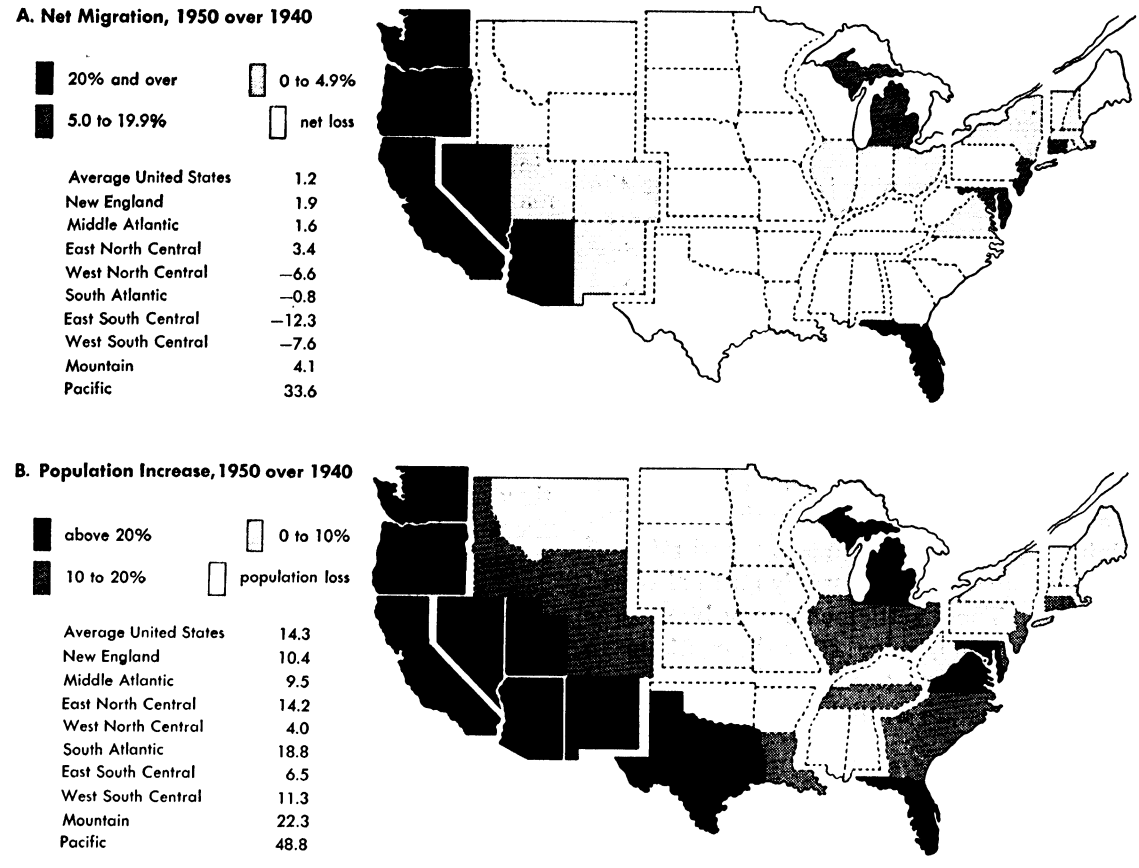
Migration westward still continues. Horace Greeley's advice, "Go west, young man," is still acted upon by families as well as by young men. The method of getting there is different, though. The movement westward is slowing up. The center of population moved westward twice as far from 1850 to 1900 as it did from 1900 to 1950.[5] At earlier times the drive to go west raged like a fever, especially when gold was discovered. For agriculturalists, especially if they are self-sufficient farmers, empty lands are the lands of opportunity. Commercial farmers as well as businessmen want the markets not found in empty lands. But the lands fill up, and there is the profit that

[5] U.S. Bureau of the Census, *Statistical Abstract of the United States*, 1955, p. 11, Fig. VII, Table 6.

147 **Maps of the United States in 1890 and 1950, Functionally Distorted According to Population**

The westward movement which began at Jamestown and Plymouth Rock still continues. Those who invested money in real estate in the Pacific Coast states in 1890 are wealthier because of it. If the trend keeps up, California may come to have more electoral votes for president than New York. (From Leland D. Baldwin, *Recent American History*, New York, American Book Company, 1954.)





148 **Population Trends, United States, 1940–1950, by States**

Twenty-six states lost population (generally young adults) by an excess of out-migration over in-migration from 1940 to 1950; yet only 4 states had fewer people in 1950 than in 1940. In 22 states, then, the excess of births over deaths was greater than the excess of out-migrants over in-migrants. (From J. Frederic Dewhurst and Associates, *America's Needs and Resources,* New York, The Twentieth Century Fund, 1955, p. 68.)

comes from being first and ready for the market as it grows. Lands go up in price, and this unearned increment in land values is one reason why young men went west. It is the pull rather than the push that gives the motivation to follow Greeley's advice.

Not all the migration has been westward. The cold smoky cities of the North have been a magnet to peoples on the move as well as the balmy climate of sunny California. The attraction of the North seems to have been the good pay in the factories of this industrial area. In the South, Florida has an appeal also, though most of the states of the South have had more people move away than have moved in during the decade from 1940 to 1950. The South is not the only region that during this period had more out-migrants than in-migrants. The area north of Arkansas and Oklahoma and west of the Mississippi had a net migration loss. In all, 26 states of the United States had more citizens move out than move in. These facts are shown in Figure 148. The distribution of population is also affected by the ratio of births to deaths. In some states the excess of births is greater than in others; and hence as time passes, these states with greater ex-

cesses of births over deaths acquire larger proportions of the population.

The states of the Far West and Southwest as well as five states east of the Mississippi experienced more than a 20-per-cent increase in population from 1940 to 1950 as is shown in Figure 148. California's population increased by 53 per cent and Florida's by 45. The smaller populations of Arizona and Nevada grew by similar percentages. This large growth of population raised land values and provided more buyers for the goods which manufacturers make and farmers grow, which is said to develop a spirit of confidence and optimism. Only four states had fewer residents in 1950 than in 1940 — Mississippi, Oklahoma, Arkansas, and North Dakota — though 26 states had a net loss in migration. Twenty-two of these states, then, had an excess of births over deaths which was greater than the loss through migration.

The internal migration in the United States is generally westward. The population west of the Mississippi increased in the decade from 1940 to 1950 by 18.4 per cent, whereas in the states east of the Mississippi there was an increase of only 12.5 per cent. Yet more people were added to the 20 eastern states, 11 million, than were added to the western states, 8 million.

The Negro population is moving to all the states of the union. At one time the Negroes were rather highly concentrated south of the Mason–Dixon Line. But with the restriction of immigration from Europe in the 1920's, the shortage of the labor supply was made up in part from the South. Both Negroes and whites moved toward the industrial cities of the North and the Pacific coast.

New York State has a larger Negro population than South Carolina; Illinois has more Negroes than Tennessee; Pennsylvania than Florida; and Ohio than Arkansas, as shown in Table 17.

This scatter of the Negro population is also shown by the fact that in 1930 there were 17 states outside of the South that had Negro populations of over 10,000 and in 1950 there were 22. There were only 4 states in 1950 with less than 1,000 Negroes.

Though Negro populations are found in all states, their proportion of the total population in the various states outside the South is small, running to about 6 per cent in the Northern states with the largest Negro populations. The proportions are larger in some of the cities. In Chicago in 1950 there was 1 non-white resident for every 6 white, and in New York the ratio was 1 in 9. In many large Southern cities the ratio is around 1 to 2 or 3.

Though Negroes have scattered to all the states, the Negro residents in southern states in 1950 numbered nearly a million more than in 1930, and the ratio of Negroes to whites is the same. Though the South may be losing some of its Negro population, there are more Negroes in the South each decade.

A good indication of the dispersal of the Negro population is the decreasing proportion of the country's total Negro population

Table 17 · Negro Population in Selected Northern and Southern States in 1950*

State	Negro Population in Thousands	Percentage Which the Negro Population Is of the Total
New York	918	6
South Carolina	822	38
Illinois	645	7
Tennessee	531	16
Pennsylvaina	638	6
Florida	603	21
Ohio	513	6
Arkansas	426	22

*From *U.S. Census of Population*, 1950, "U.S. Summary, General Characteristics." Table 59, p. 106.

living in the South. In 1930, 73.2 per cent of the Negroes in the United States lived in the southern states, whereas by 1950, this figure had dropped to 67.8 per cent.

There are various measures of the dispersal of Negroes in the United States. It has been necessary above to examine several in order to get a fair idea of the movement.

RURAL–URBAN DISTRIBUTION

The World

The movement of populations to cities is creating a new distribution. Peoples not only move to different geographical areas but also within an area they move into large clusters which we call cities. Historically, it is a relatively recent phenomenon, aided by mechanical inventions of production and transportation. So we find the proportion of people living in cities high only in the advanced countries or in spots in the less advanced.

This distribution is measured by the proportions of population in an area who live in cities and who live in rural areas. The way of life is quite different in rural and in urban communities; so this distribution is important.

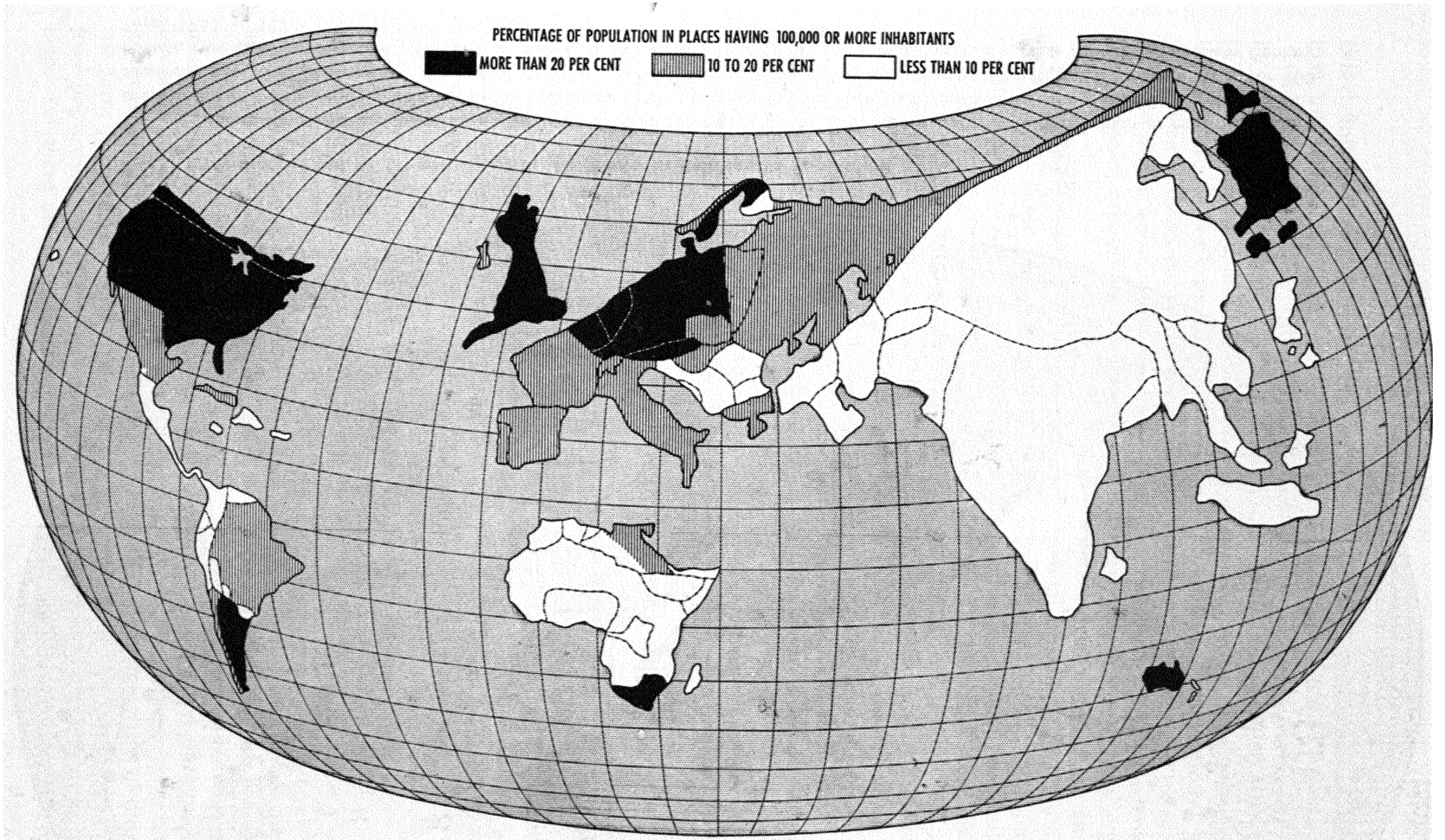
The areas of the world that had more than 20 per cent of their population living in cities of 100,000 and over in 1950 were the United States and Canada, the Argentine and Uruguay, Australia, Japan, and the northwestern part of Europe, as is shown in Figure 149.

It would be interesting to know the extent to which different countries are urbanized, but the different countries do not define urban and rural in the same way. However, in Table 18 are shown, for a few countries on which data are available, the percentage of the population living in places with more than 10,000 inhabitants. Thus in Holland in 1946, 70 per cent of the population lived in places of over 10,000 inhabitants, while in the United States in 1950, 52.4 per cent lived in places of more than 10,000 population. Holland has very little agricultural land, while the United States has much. The New England states, with about the same population as Holland, have almost the same percentage of their population living in places of less than 10,000. So the degree of urbanization is a function of geographical terrain as well as of the development of trade and manufacturing. Nevertheless, it is a fact that Holland is more urbanized according to

Table 18 · Urbanization of Selected Countries as Shown by the Percentages of the Population Living in Places of Over 10,000 Inhabitants, 1930–1951*

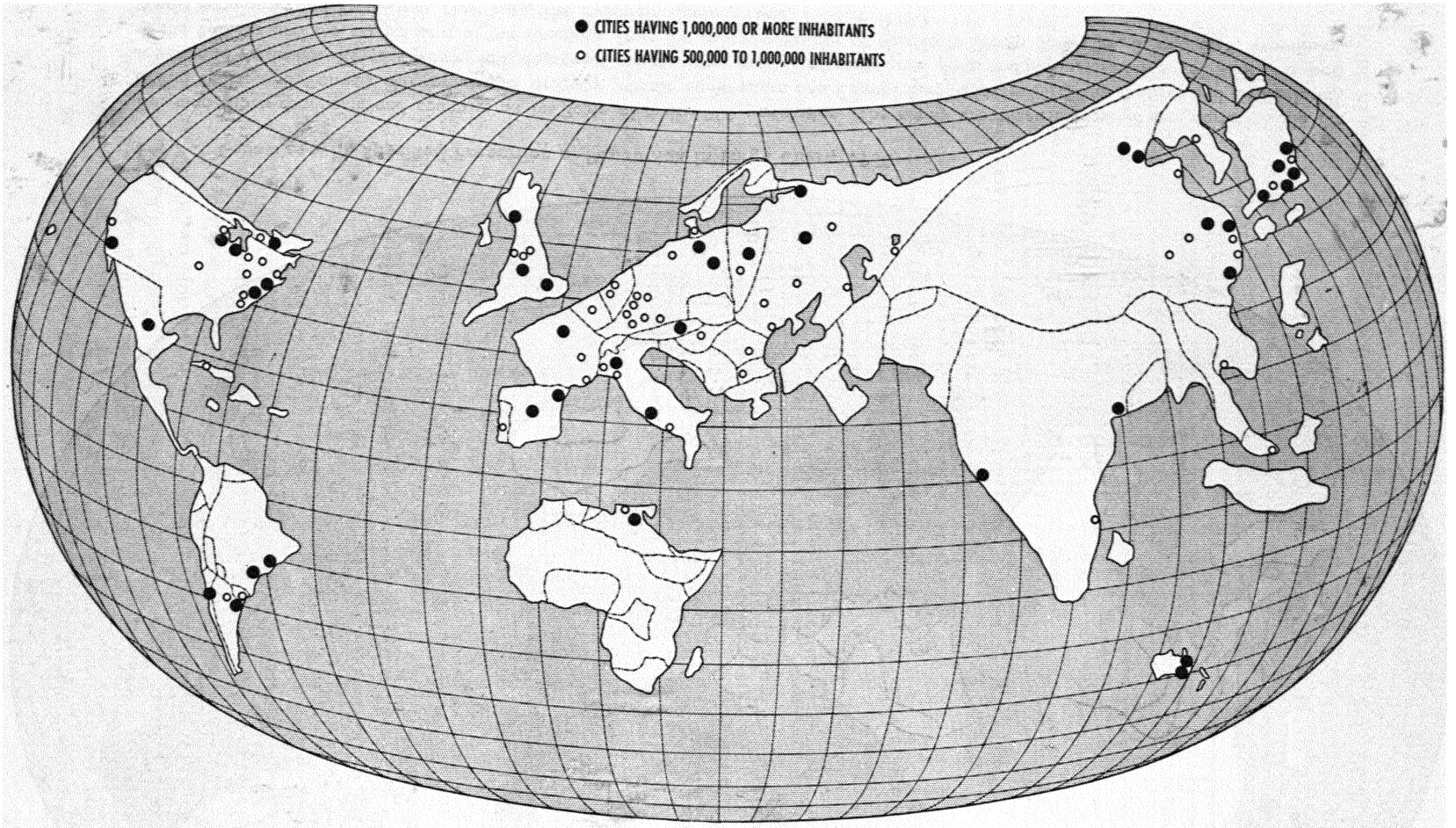
Country	Percentage of Population in Places of Over 10,000 in Population
United Kingdom	75
Holland	70
Australia	57
Argentina	52
Italy	50
Spain	49
United States	48
Finland	47
Belgium	46
Hungary	46
Sweden	42
Denmark	42
Chile	41
Canada	38
France	38
Switzerland	33
Union of South Africa	30
Mexico	26
Egypt	23
Rumania	21
Turkey	18
Yugoslavia	17
Portugal	16
India	11

*Adapted from the *United Nations Demographic Yearbook* (1948) with some additions from later censuses.



149 Countries with Specified Proportion of Population in Large Cities, 1950

This map shows continents and countries on the scale of their 1950 population. The highly urbanized regions of the world include the United States and Canada, Argentina and Uruguay, almost all Western and Central Europe (except Ireland, France, and Switzerland), Japan and Australia. Regions with a low degree of urbanization are all of continental Asia, Indonesia, almost all of Africa, a part of the Balkans and the central part of the Americas, from the southern border of Mexico to Brazil. (From W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953, p. 119.)



150 Location of the 97 Largest Cities in the World in Relation to Population

This map shows continents and countries on the scale of their 1950 population. In Europe, super-cities with a million or more inhabitants are distributed fairly evenly in relation to the population, with one super-city for each 30 million people. The United States also has one super-city per 30 million persons; the rest of America, only one for each 40 million persons; the U.S.S.R., for 86 million; Asia, for 100 million; Australia, for 5 million. (From W. S. and E. S. Woytinsky, *World Population and Production,* New York, The Twentieth Century Fund, 1953, p. 123.)

this definition than the United States, whatever be the reason.

One other reason why Table 18 should not be interpreted too literally is that the years of the censuses vary, and for some countries the data are not very recent. However, the table does present data with enough precision to permit some useful inferences about the degree of urbanization in different parts of the world.

The urbanization of different countries, as shown in Table 18, suggests that several countries not notable for a high degree of manufacturing are nevertheless highly urbanized, as, for instance, Argentina. This high degree of urbanization in the absence of a high degree of industrial development can be explained in some instances by the existence in these countries of cities located on seacoasts and other places which make them well-situated for intercontinental trade. Many of the largest cities in the world are found on the seacoast or in a place readily accessible to the ocean, as can be seen in Figure 150, which shows the location of cities of 500,000 and over.

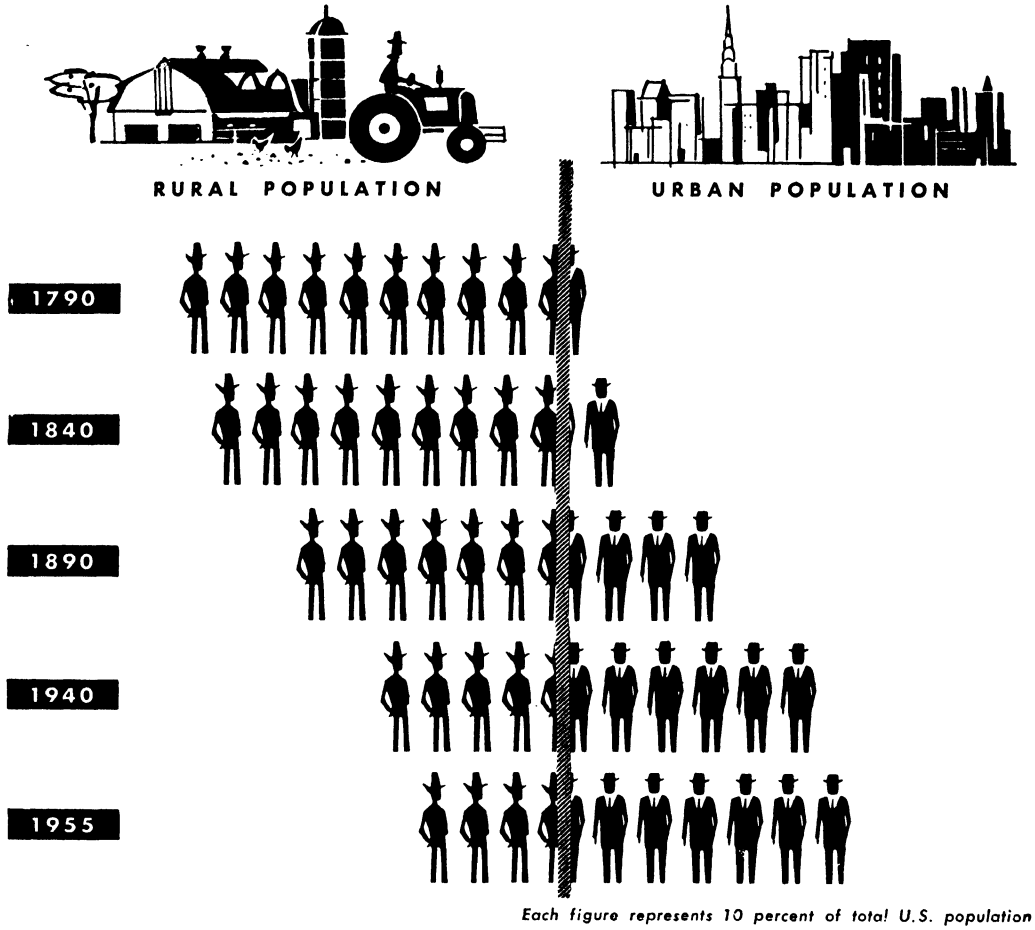
The United States

The farm population is diminishing. In 1790 we were a nation of farmers. Ninety-five per cent of the population was rural — that is, lived in places of less than 2,500 population, though not all of these were farm families. Since then the percentage of the population that is rural has been getting smaller. In 1950 it was only 36 per cent.

We are becoming less a nation of farmers, although their political influence may be great and their way of life admirable. The farm population in 1950 is 7 million less than it was in 1910. The largest farm population in the United States was in 1916. In 1910 the farm population was 35 per cent of the total population. In 1950 it was only 16 per cent. Yet there are 68 million more people in the United States (1950) to feed than there were 40 years earlier, with 7 million fewer persons on farms to produce the food.

The reason for this diminishing rural proportion of the population is the increasing efficiency of agricultural production. A farmer produces more today because he uses more insecticides, better tools and machines, and also because he has a greater scientific knowledge of fertilizers and of plant and animal breeding. In 1820, one farm worker produced enough to support 4 persons, whereas in 1955 he produced enough to support 19 persons. This change is shown graphically in Figure 152. The increased use of machinery and scientific discoveries will probably mean that in the future one farmer may be able to feed many more city dwellers than he feeds today. Hence an even smaller proportion of farmers is to be expected.

These remarks clearly show the redistribution of the population away from the rural communities, but they do not indicate how little city life there was in 1790. At that time only 3 per cent of the population lived in places of over 8,000 inhabitants, and it was not until 1820 that there was a city of 100,000 population in the United States. We all know that cities existed in those days — New York, Philadelphia, Boston — but it is often not realized how small they were and what a meager percentage of the population lived in cities. Large cities became prevalent only after the Civil War. In 1950 almost a third of the population (30 per cent) lived in cities of over 100,000 population, and about one-eighth in cities over 1,000,000. It used to be that students in college had special need for courses about the strange ways of city life, the rural background being common. The reverse is often more nearly true today. Since five-sixths of the population live away from the farms, it is often desirable for sociology teachers to acquaint their students with the strange ways of rural life.



151 The Diminishing Proportion of Rural Population, 1790–1955

The diminishing size of the rural population, accompanied by the growth of the urban population, has been influential in bringing about a shift in customs and philosophy of life. Will the proportion of farmers continue to diminish during the next century? And, if so, with what consequences? (Data from *Our Cities*, Washington, D.C., National Resources Committee, Government Printing Office, 1937, p. 1; and from the United States Bureau of the Census.)

The village population remains the same in relative size. The proportion of the population living in villages has not changed much in recent decades. Perhaps these villagers are reasonably well adjusted. At least they have had a long enough experience to learn well their way of life; for in this country at the time of the founding of the republic, nearly all families that were not on farms lived in small places we now call villages. Indeed village communities existed even before the dawn of history.

Communities of less than 2,500 population are here called villages, though places with over 500 or 1,000 population are sometimes called towns. In earlier times a place of 2,500 inhabitants would have been spoken of as a large town or even a city. In 1950, in the United States there were 31 million people living in these small communities,

larger in number of people than the 23 million who live on farms. Six and a half million live in communities between 1,000 and 2,500 in population. These are fewer in number than the population of New York City. Many more, 25 million, live in little communities or groups of less than 1,000 population, but not on farms.

Although all communities of, say, 1,000 population have common characteristics as indicated in the preceding chapter, yet life in American villages is changing. For the communication inventions, the radio, television, motion picture, are bringing the sometimes more and sometimes less glamorous city ways to the village and hence modifying some of their folkways.

Towns and small cities have about the same numbers of people as do the large cities. In places from 2,500 to 10,000 live about 10 per cent of the population of the United States in 1950, while in small cities under 100,000 there are nearly 20 per cent.

It is to places of these sizes that farmers move when they leave the farms, and not to the big cities. The big city migrants come from the towns and small cities, as well as other large cities. The in-movers from farms range from 1 or 2 per thousand of the resident population for the big cities regularly to around 35 for the villages.[6]

The proportion of the population living in big cities, that is, over 100,000 in population, was quite small at the time of the War Between the States, 8.5 per cent. Larger and larger proportions at each decade were found to be living in these big cities until 1930 when the percentage was 29.6. There has been no increase since then. Thus, about 3 out of every 10 persons live in a big city.

A peculiarity of big cities especially is that the political boundary line does not include the people who live contiguous to the populations in the city. The area just outside the boundaries is called the fringe. These fringe dwellers are much the same as the

[6] Data supplied by Professor O. D. Duncan, University of Chicago.

152 Persons Supported by Production of One Farm Worker, United States, 1820 and 1955

If the birth rate in the cities continues to fall and the migration from the farms to the cities declines, will not the farmers raise more products than the city dwellers can consume? One hundred and fifty years ago, nine farm families were required to feed one city family. Fifty years hence, how many city families will one farm family be able to feed? (Data from "Changes in Farm Production and Efficiency," *Annual Summary*, U.S. Department of Agriculture, 1956.)

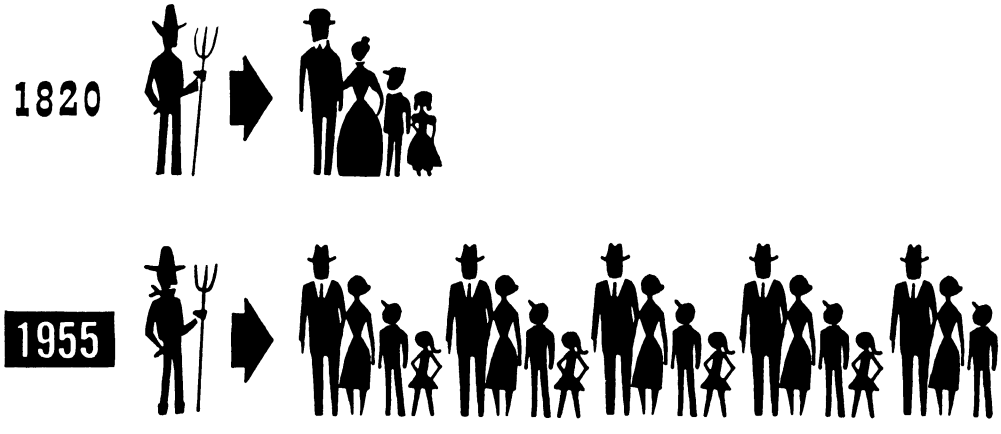


Table 19 · Percentage Distribution of Population by Size of Place, United States, 1950*

Size of Place	Percentage of Total Population of the U.S. (1950)
3,000,000 or more	14.0
1,000,000–3,000,000	11.1
250,000–1,000,000	11.6
50,000–250,000	9.3
25,000–50,000	4.7
10,000–25,000	5.5
2,500–10,000	7.9
1,000–2,500	4.3
Under 1,000 (incorporated)	2.7

*Data supplied by Otis Dudley Duncan, University of Chicago. The population of the fringe areas has been included in the population of cities of over 50,000 inhabitants.

population living within the city limits except they do not pay city taxes or vote in the city.

There exist data for 1950 giving the population of all cities over 50,000 plus the population of the fringe. In Table 19 is shown the population of communities in the United States classified by size; the sizes for cities over 50,000 include the fringe population.

More people are living in or near big cities. The tendency of families to live near a city has led to a new population unit called the metropolitan area. The standard metropolitan area in 1950 is a county (or group of contiguous counties) which contains at least one city of 50,000 population and in addition may include other contiguous counties if they are metropolitan in character and are economically integrated with the central city.[7] There were 168 such standard metropolitan areas in the United States in 1950. Their location is shown in Figure 153.

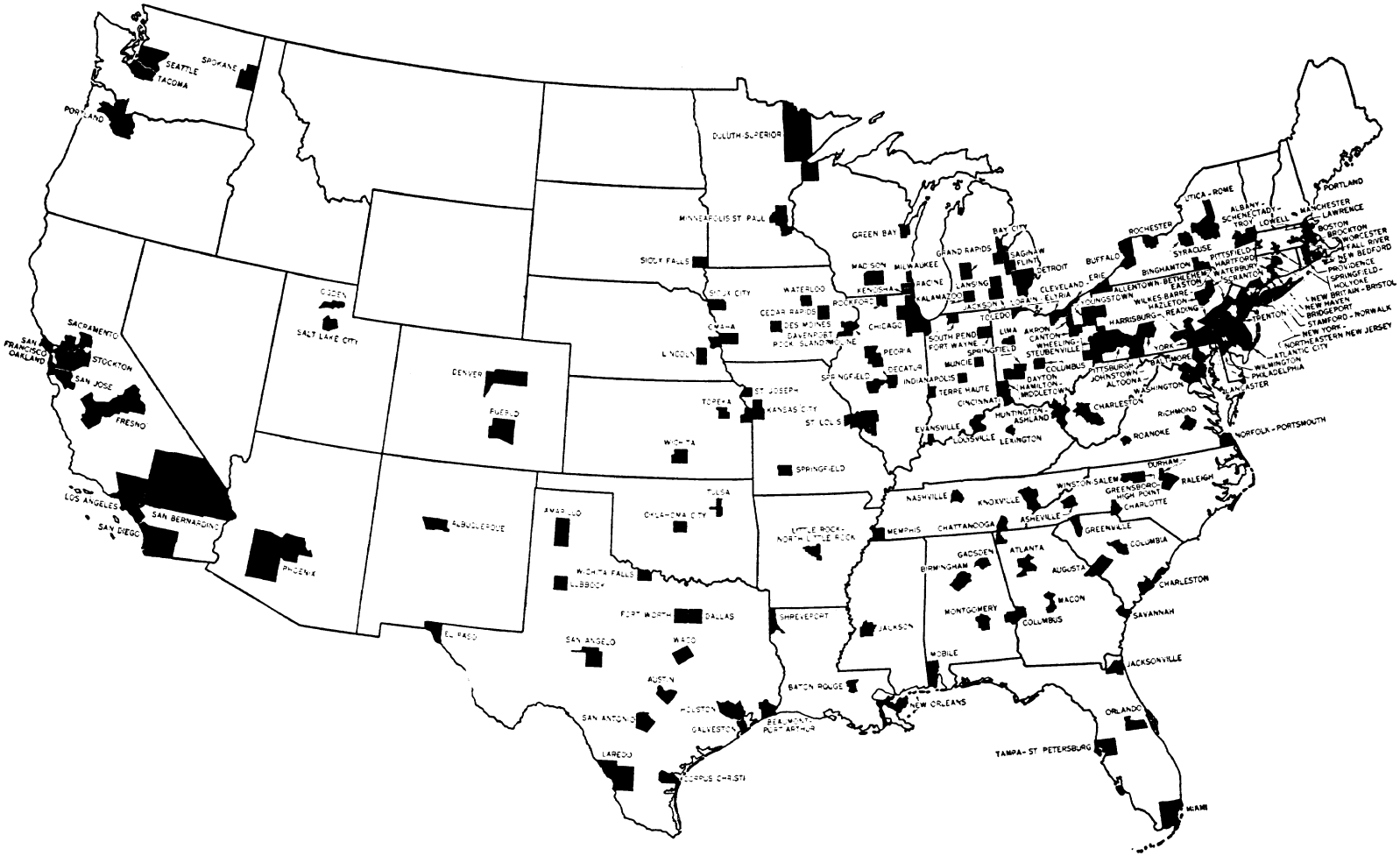
More than half of the populations of the United States lived in these standard metropolitan areas in 1950. At the time the republic was created, there were no cities of 50,000 population, but now 56.3 per cent of the citizens live in cities of this size and larger or in the near-by environs. Thomas Jefferson, lover of the countryside, would be astounded at this shift in our citizenry. The size of the metropolitan area of New York City is fabulous and contains 8.5 per cent of the total population of the United States. That is, 1 in every 11 or 12 persons in the United States is a resident of the New York City metropolitan area.

In 1940, these same 168 cities with their near-by environs had 52.8 per cent of the population. The metropolitan areas continue to grow. The fastest growing metropolitan areas were in the Far West and the South as shown in Table 20. Also they were generally below the average in size. The growth of some was stimulated by war industries.

The central cities of the metropolitan areas do not increase in population as rapidly as the outportion, called the ring, although that is not a very accurate description of the shape. The population in the rings increased 29.3 per cent from 1950 to 1956, whereas the population of the central cities increased by only 4.7 per cent.[8] (The population of the United States as a whole increased 9.8 per cent.) The growth outside the central cities is mainly in the rural, non-farm areas.

[7] A county with metropolitan characteristics is one that contains 10,000 or more non-agricultural workers and with one-half or more of its population living in municipal districts with a population density of 150 or more per square mile and contiguous to the central city; and the non-agricultural workers must constitute two-thirds of the total number of employed persons in the county. The integration is measured by the following criteria: at least 15 per cent of the workers residing in the contiguous county must work in the county with the largest city in the metropolitan area; 25 per cent of those working in the contiguous county must reside in the county with the largest city; finally, the number of telephone calls to the county with the central city must be four times the number of subscribers in the contiguous county.

[8] U.S. Bureau of the Census, *Current Population Reports: Population Characteristics*, Series P–20, No. 71, December 7, 1956.



153 Standard Metropolitan Areas, 1950

Over half (56 per cent) of the population of the United States live in the areas represented by the black spots on the map. One out of every eleven persons in the United States lives in the metropolitan area of New York City. (From U.S. Department of Commerce, Bureau of the Census.)

The attraction of the metropolitan areas is, in the main, jobs or jobs with better pay. The attraction of the ring is probably more space for factories and for families.

Of the people living in metropolitan areas, 63 per cent live in the central cities and 37 per cent live in the environs. The rings of the metropolitan areas, then, contained in 1950 about 30 million people. In many of their urban attitudes and customs, these people who live in the suburbs and satellite towns and cities and even in the rural areas of the ring are much like those who dwell within the city limits. They are certainly very familiar with city life.

Table 20 · The Ten Fastest Growing Standard Metropolitan Areas, U.S., 1940–50

Areas	Percentage Increase
Albuquerque, New Mexico	110
Lubbock, Texas	95
San Diego, California	92
Miami, Florida	85
Phoenix, Arizona	78
Norfolk–Portsmouth, Virginia	72
Hampton–Newport News, Virginia	70
San Jose, California	66
Orlando, Florida	64
Sacramento, California	63

SUMMARY

A combination of geographical and cultural factors determines the distribution of population at any given time. Modern societies rest on agriculture, which demands fertile soil, and also on manufacturing, which requires coal and iron; since these resources are unevenly distributed, the population of the world is unevenly distributed, with concentrations in the Old World and in the Northern Hemisphere.

The Industrial Revolution originated and flourished among Europeans. As a result, the white race is the most numerous and the most widely dispersed. The popular belief among whites in the rising tide of color is based on fear and prejudice rather than on fact.

Changes in the distribution of population result from the operation of two factors, migration and the ratio of births to deaths. People migrate because of the attraction of the new region, or the repulsion of the old, or both. In the past, the most outstanding dispersal of population has been from Europe and has led to migration over great distances; but the development of nationalism in recent decades has brought limitation on emigration and immigration. The result has been a curtailment of international migration and an accentuation of mobility within the nation in quest of a higher standard of living. In the United States there has been a pronounced shift in population from the farms to the towns, cities, and metropolitan areas. An important effect of the decline in farm population is to accentuate urban patterns of social behavior.

QUESTIONS FOR DISCUSSION

1. Why is the population of the world unequally distributed?
2. How is the widespread dispersal of European stock to be accounted for? What is its significance?
3. Where are the most densely populated regions of the world? What factors determine this density?
4. How have the distribution and density of population, by races, been altered during the last three centuries? How do you account for these changes?
5. What factors cause people to migrate? How do you rank these factors in importance?
6. How valid is the theory that population pressure causes war?

7. What are, at present, the chief barriers to international migration? Are they likely to increase or decrease in the future?
8. What factors account for the drift of population from farms to urban areas? Will the trend continue?
9. Is Negro migration in the United States likely to affect the pattern of race relations?

TOPICS FOR REPORTS

1. The history of the United States Census Bureau.
2. The wanderings of preliterate peoples.
3. The slave trade and the redistribution of African Negroes.
4. Estimates of world population in the seventeenth, eighteenth, nineteenth, and twentieth centuries.
5. The relation of modern transportation to migration in the last century.
6. Problems of the international control of population redistribution.
7. The concept of the metropolitan area.
8. Changes in the distribution of the Negro population in the United States since 1900.

SELECTED READINGS

GOODRICH, CARTER, *et al.*, *Migration and Economic Opportunity.* Philadelphia: University of Pennsylvania Press, 1936.

The relation of internal migration and equalization of economic opportunity is probably the major population problem of the United States at the present time. This book presents very sharply and clearly the nature of the problem.

JEROME, HARRY, *Migration and the Business Cycle.* New York: National Bureau of Economic Research, 1926.

This book contains data to support the theory that in migration to the United States the pull is greater than the push.

LANDIS, PAUL H., *Population Problems: A Cultural Interpretation.* New York: American Book Company, 1943.

Especially good in dealing with the significance of population distribution.

PALMER, GLADYS L., *Labor Mobility in Six Cities.* New York: Social Science Research Council, 1954.

A recent study of internal migration based upon the two questions on that subject in the last two censuses. New information on migration into and out of urban areas.

Statistical Abstract of the United States.

This annual publication of the U.S. Bureau of the Census presents each year data on the distribution of population by states in the United States, by rural and urban areas, and also by size of communities.

TAFT, DONALD, and RICHARD ROBBINS, *International Migrations.* New York: The Ronald Press Company, 1955.

A useful and systematic general account of recent migrations, with special emphasis on the United States.

THOMAS, DOROTHY S., *Research Memorandum on Migration Differentials.* New York: Social Science Research Council, 1938.

Out of the vast literature in the field of migration, few studies have proved anything. The author sorts out what is worth while and reliable in the literature for the United States and for Europe.

THOMPSON, WARREN S., *Population Problems,* fourth edition. New York: McGraw-Hill Book Company, Inc., 1953.

This account of the population of the United States is a good, straightforward, well-balanced presentation. An excellent treatment of the existing problems

United Nations Demographic Yearbook.
This source book, issued annually by the United Nations in New York, consists largely of the most recent data on the distribution of population in the various countries of the world, though there is very little on the urban–rural distribution and on the distribution by regions within a country. The text to accompany the voluminous tables is scant.

VANCE, RUPERT B., *All These People.* Chapel Hill, N.C.: University of North Carolina Press, 1945.
The very human aspects of population as seen in industry, agriculture, education, and planning. An unusual number of excellent maps and charts, with special emphasis upon the South.

VANCE, RUPERT B., *Research Memorandum on Population Redistribution Within the United States.* New York: Social Science Research Council, 1938.
Vance has taken the data and problem presented by Goodrich and others and has indicated studies that ought to be undertaken by students of population in the United States with a view to correcting the maldistribution of population.

WOYTINSKY, W. S. and E. S., *World Population and Production: Trends and Outlook.* New York: The Twentieth Century Fund, 1953.
This book is an encyclopedic report on the population of the world, its distribution in various countries, the basis of natural resources, and on migration, illuminated with many excellent charts, maps, and diagrams.

15

The Growth of Population

The size of a community is often a matter of local pride, particularly in the United States, where "bigger and better" is frequently the slogan. Portland wants to be bigger than Seattle, Seattle to be bigger than San Francisco, which in turn would like to be as big as Los Angeles. This ambition to be bigger is noticed particularly in the years when the decennial census of the United States is taken. Many cities will take in additional territory just to show a greater growth than a rival. There is a prejudice in favor of the growth of population. Though an individual may be unaware of such a prejudice, it may express itself later as a feeling of elation over growth, or may show itself in an argument. Since such a bias exists, it is better to approach the study of population growth in a detached manner, as should be the case also with the study of many other sociological problems. After the problems are studied, then emotion may be mobilized to do something about them.

People often feel that they can do something to make their communities grow, as, of course, they can. These efforts are directed toward attracting new residents. Migration thus becomes a proper subject of governmental policy, and is now subject to regulation in the United States. In contrast, the growth of population by births is often viewed as a matter of nature, and not a proper subject for state population policy. Nevertheless, states today consider the size of the population as a field in which the government may, or indeed, must, exert an influence, whether for a bigger army or to keep out undesirables. All modern states have a population policy of some kind or degree, which shows the need for fundamental knowledge of the facts concerning the population of the state.

HOW THE POPULATION OF THE WORLD IS GROWING

The population of the world is reckoned at 2,400,000,000. When men lived by hunting, fishing, and food-gathering, with only rough stone implements, the world's population probably numbered only a few hundred thousand — not as many people as are found at present in any one of twenty different cities in the United States. Such an estimate is based upon figures of the density of population among hunting peoples living today with very simple stone and wooden tools and weapons. The increase was so low, probably a fraction of a per cent a century, that the population could be called stationary. The duration of the Old Stone Age is thought of in terms of, say, 100,000 to 500,000 years.

With the coming of agriculture, its spread and development, population grew faster, up to the time of the Roman Empire, probably at a rate of 6 to 10 per cent a century.[1]

[1] These estimates are taken from a paper read by John Durand at the Thirtieth Institute of the Norman Wait Harris Memorial Foundation held in Chicago in 1954.

This increase is slight, being less than 0.1 per cent per year. In some areas the growth was faster than in others; but in terms of the memory of a family the growth was negligible, and population would have appeared to a family as stationary. For the next thousand years the growth may have been even slower. But by 1650, the population of the world was around 500,000,000; and in 1850 it was 1,200,000,000. During these 200 years, the growth of population was at a rate of 48 per cent per century.

During the next hundred years, from 1850 to 1950, the population grew by 100 per cent. In fact, in these 100 years the increase in population was greater than in all previous time since the begining of mankind. The population is increasing even more rapidly at the present time, when in fifteen months there is added to the population of the world a population equal in numbers to that of France. Before the reader finishes reading this page the world's population will have increased by seventy persons (the excess of births over deaths). These must be fed, of course.

To feed the 2,400 million inhabitants of the world, there are in cultivation 2,400 million acres, or one acre per person. In the United States there are 2.2 acres of cultivated land per inhabitant. Pasture land furnishes food also. Of crop and pasture land there are for the world as a whole about 1.5 acres per person. If the population of the world is increased 50 per cent by 1980 and the cultivated land is not increased, then there would be only two-thirds of an acre per person, instead of one acre as in 1955.

The cultivated land can be increased. Though the total land area of the earth is 35,700 million acres and less than 7 per cent is cultivated, most of the earth's land surface is uncultivatable. Yet more land can be reclaimed by irrigation and by drainage, and hills may be terraced. Indeed peasants have at times created new lands by hauling soil by the bucketful and putting it on top of rocks. O. E. Baker, who was somewhat optimistic by nature, has placed the ultimately arable land as 15 per cent of the total. Should the arable land be increased by half this much by 1980, a most formidable undertaking, there would still be one acre per person. But the potentially arable land is not evenly distributed. Most of it is in Africa, Oceania, and in the Americas. What of the ratio of land to population in the twenty-first century, which is not far off? We can accommodate more people by eating less. Or we can discover new ways of producing food, assuming the world's population continues to increase in the next hundred years as it is increasing now.

We need to inquire further into the possible increase in population; but in order to do so, we must examine the trends in birth rates and in death rates which determine the rate of growth.

Before looking at the increases and decreases of births and deaths and the causes thereof, we tarry for a few pages to have a further look at the significance of population increase by telling how Thomas Malthus viewed it at the close of the eighteenth century. No one has dramatized the situation more successfully than this moralist-economist.

The pessimism of Malthus. If the world continues to grow as it has in the past three hundred years, in another three hundred years the population will be nearly 8½ billion, and by 2500 there will be nearly 25 billion. One famous thinker and writer, Thomas Malthus[2] (1766–1834), viewed such a possibility of great growth of population as a tragedy.

Not all people are optimistic about the growth of population. As the first major student of the question, Malthus was op-

[2] T. R. Malthus, *An Essay on the Principle of Population*, 1909 edition (New York: The Macmillan Company).

posed to population growth as it was then occurring. His objection was that population grew faster than the food supply. If the population were just doubling each generation, it would go forward very rapidly, as is seen by the geometric progression 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, and so on. The total numbers increase very rapidly after the series has run a while, even though the rate factor remains the same. But food, he argued, increased in an arithmetic series, such as 2, 4, 6, 8, 10, 12. By the term food Malthus really meant land on which to grow food. A food, such as corn, would increase like the population if the supply of land were unlimited. In England at the close of the eighteenth century when Malthus wrote, the food supply could be increased appreciably only by adding more land to the cultivated areas, and the amount of land was definitely limited.

The situation he depicted was of a race between the supply of men and the supply of food. The number of men must inevitably outrun the food supply, no matter how big the handicap. According to Malthus, if the Pilgrim Fathers alone had come to the United States, and they had found an empty continent, their progeny would have eventually filled it.

But winning the race between the supply of men and the supply of food really meant losing. If there are few eaters and much food, the standard of living is high, but if there are many eaters and the food supply is relatively small, the standard of living is low. Thus Malthus saw mankind doomed to hunger. What if the Black Death killed off a third of England, and as a consequence wages and the standard of living rose? It was only a question of time before the breeding propensity of the people produced as many people in relation to the food supply as existed before the plague. What if the standard of living in America is due to the scarcity of population? Soon the population will be so large in relation to the food that poverty and misery will result. Such are the implications of the Malthusian theory. Thus economics, of which Malthus was one of the founders, became known as the dismal science.

Limitation of Malthusian theory. Malthus' logic was good but unfortunately his observations were not sufficiently extensive. The first weakness in Malthus' theory is its failure to appreciate the power of birth control, a cultural factor. Since Malthus' time the peoples of the Western world have learned how to lower the birth rate. In 1860 the average birth rate for nine countries of northwestern Europe was 34.1 per thousand population. Seventy-five years later the birth rate had been cut in half.[3] A falling birth rate can quite invalidate Malthus' idea that man must inevitably increase in geometric ratio.

The second weakness in the theory lies in the failure to appreciate what culture in general can do. It is culture that has invented birth control. Culture has increased the yield of agriculture. Someday culture may show us how to get food by combining carbon dioxide, water, sunshine, and chlorophyl — thus freeing us altogether from the cultivation of the soil. Culture has extended trade and developed the occupations of city dwellers, who do not farm for their food. All this is not to say that the natural resources of the earth do not practically set limitations, sometimes sharp and severe, to population growth. These limitations, though, are being changed by culture from time to time, particularly by chemistry, which makes new and unheard-of molecules and now creates new atoms. Culture can make "the dismal science" highly optimistic. Whether culture will do so in the centuries ahead is a question for which we do not have the answer now.

[3] A. M. Carr-Saunders, *World Population* (Oxford: The Clarendon Press, 1937), p. 64.

The propositions of Malthus are less applicable, at any one time, to cities with world trade, than to agricultural areas where farmers buy and sell little and there is little migration. For instance, if there are in an area 200,000 cultivated acres and 10,000 farms, then the acres per farm are 20. But if the population doubles, then there will be only 10 acres per farm family. Since land is the sole source of income, the farmers, assuming the same techniques, will be getting nearer to poverty. But in cities where food is brought in from all parts of the world, the citizens, who are traders and manufacturers, do not see any simple connection between food production and standard of living, especially if scientific agriculture is increasing yield per acre and trade is opening new sources of food. City people are more likely to view increasing numbers of people as a source of more income, since they are a market and represent a greater demand for land and for all the goods they sell. If markets recede, unemployment and a lowered standard of living may result, for there will be a surplus of labor. Similarly if labor-saving machines are introduced without expanding markets, there may be too many people. A large urban population consumes much food and various natural resources, of which the known supply is limited. The relationship of population to standard of living is further examined in the section which follows.

The Standard of Living and Population

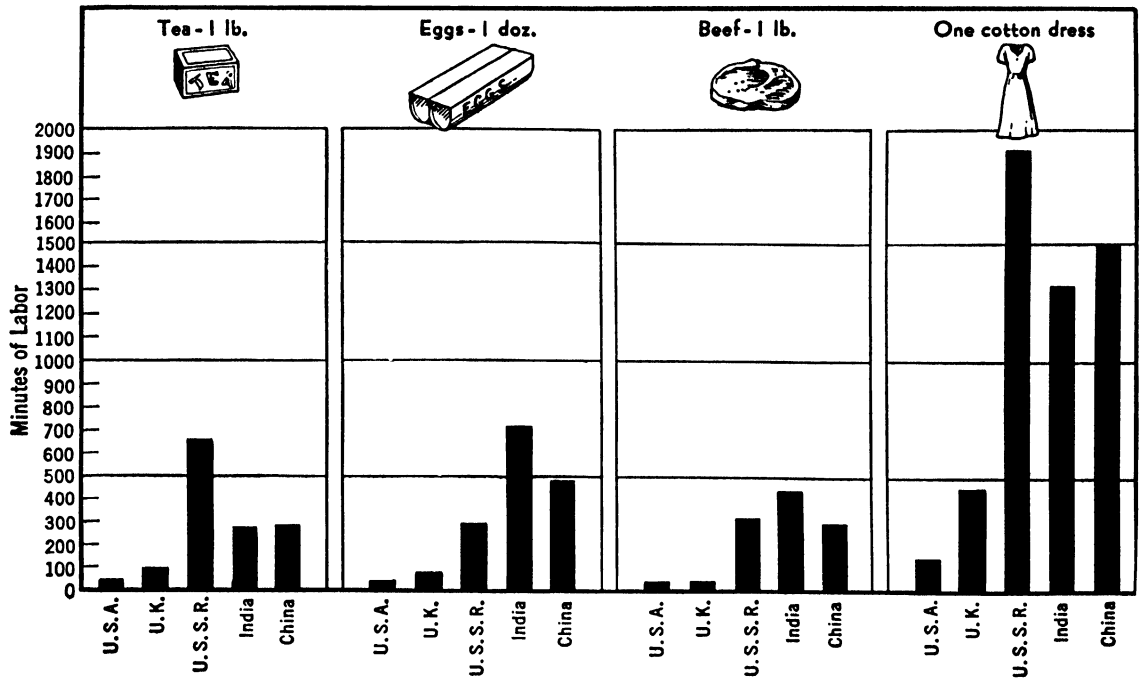
The standard of living is a function of four variables, not just two (food and population), as Malthus said. That is to say, the plane of living goes up or down according to the changes in four conditions: (1) natural resources, (2) invention, (3) social organization, and (4) population.

Natural resources. The effect of a diminution of natural resources is to lower the standard of living. Those countries that have poor land, no coal, and few minerals have not much possibility of getting a large share of the good things of life. Similarly, the countries that are rich in resources can have rich people. If the inhabitants of the United States use up all their oil, diminish their easily accessible coal and iron supplies, and let the fertile soil of the sloping hillsides wash away, the standard of living will be lowered. One of the reasons why England has a higher standard of living than Norway is that she has more abundant natural resources.

Invention. The effect of invention is also to raise the standard of living, as was done by the bow and arrow, the hoe, the plow, the steam engine, and the dynamo. The plane of living is higher in America now than before the discovery of America by the Norsemen, because the whites have more inventions than the red men had. China's plane of living will be higher when it has a better technology. The utilization of natural resources is not independent of the state of inventions. Waterfalls were of no use to the American Indians, but they add greatly to the wealth of the present inhabitants of the United States.

One of the most optimistic signs of a better material future is the continued growth in the number of inventions in chemistry, electrical goods, communication, transportation, and other fields which will add to the prosperity of the country.

Social organization. The standard of living is further increased by a highly efficient social organization. Division of labor, more trade, a good money and credit system, efficient laborers, all tend to increase production, which means more goods to distribute among the people. On the other hand, a society highly disorganized by a long and destructive war has lower living conditions. War sometimes means a bar to trade, currency fluctuations, bad credit, and



154 Costs of Goods in Different Countries

• The bars show the minutes of labor required to earn the money to buy certain items of consumption in different countries in the second quarter of the twentieth century. How • are the differences to be explained? Organization? Capitalist United States had low prices, • Communist Russia high prices; India and China had high prices and no Communism (when these figures were compiled). Population pressure? Great Britain (U.K.) has higher population density than India or China. Natural resources? They are plentiful in all these countries. Technological development, with increasing man-hour productivity, is the key. (The basic data are from the U.S. Bureau of Labor Statistics, but some were collected by the authors from consular offices. Wages are average factory wages and include both skilled and unskilled labor. Dates are generally postwar; wages and prices are for the same year. The selection and computations are the authors'.)

disarranged production. For these and other reasons, Europe was slow to recover after the World Wars. Revolutions also disorganize production.

There is some discussion about whether the economic organization is less or more productive when it is closely related to government. It may be argued that the planning made possible by governmental control increases the efficiency of production. Controversy also exists over the relative efficiency of collectivism as seen in Russia, or socialism in Britain, of the cooperative systems of Scandinavia, and of the free enterprise system of the United States. They illustrate how variations in the economic organization affect the standard of living.

Population. On the whole, a small farm population means a higher standard of living than a large one, as Malthus said. In the southern states of the United States the farm population is much more dense than in the North Central states. In 1950 there were 5.5 acres of cultivated land per farm inhabitant in the South Atlantic and East South Central states and 36 acres per farm inhabitant in the West North Central states. In the South the standard of living was

lower, as would be expected. If the total value in 1950 of farm products sold, less livestock in the South, is divided by the total farm population, there was $330 a year per farm person. The corresponding value for the North Central states was $720. India and China and Japan are densely settled and have a low standard of living. The newer countries are less densely settled, as evidenced by the United States, Canada, Australia, and New Zealand; and these countries have the highest standards of living to be found anywhere in the world today.

In the preceding paragraphs each of the four factors affecting the standard of living has been discussed as if the others were constant. But in society they are all closely interrelated, and often change at the same time.

Interrelationship of all four factors. We have seen that the standard of living is not a matter solely of the relation between population and food supply, but is the result of at least four factors. These must be taken into consideration in examining any population situation. Thus Italy, a rather densely populated area, had before the war a rising standard of living in the face of a growing population. The reason was that Italy had many new technologies to utilize and perhaps had a social organization that increased its efficiency. If there had not been the adoption and use of many new inventions, and if there had been no improvement in the economic organization, the standard of living would probably have been lowered as the population increased.

In Figure 154, the standard of living is compared for several countries in different parts of the world, varying in density of population, degree of technological advance, economic organization, and natural resources. The standard of living is made independent of price by showing the number of minutes of labor required to earn enough money to buy items of consumption.

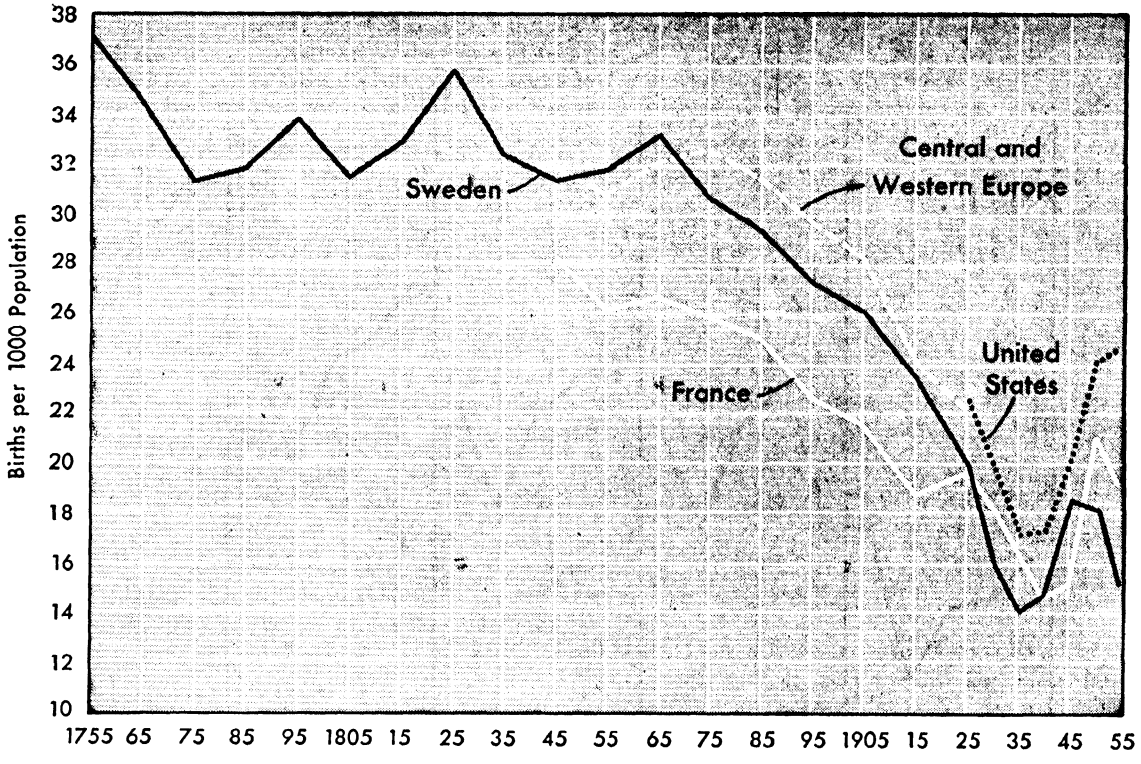
In general, less labor is required to purchase goods in the United States and in Britain — countries with a high technological development where the productivity of labor per hour is great — than in China and India with a low state of the industrial arts and much hand labor with crude tools. The Soviet Union is somewhat more advanced, but not as far advanced as the United States and the United Kingdom. The countries with the lesser use of machines require more hours of labor to purchase foods. If much labor is required to purchase consumer goods, the standard of living is naturally low.

How does population density compare with technology as a factor in the standard of living? China and India, with low standards of living, have densities of 41 and 90 persons per square kilometer, much higher than the United States with 17. So it would appear that population density is a factor too. But the United Kingdom has a higher density, 195, than either China or India and yet has a much higher standard of living. The U.S.S.R. has a low density of 8, yet a high cost of living. Population does not seem, then, to be as much of a factor as technology.

As to economic organization, the lower standard of living of the Soviet Union has been attributed to Communism. But such an interpretation seems doubtful in view of the low plane of living in India which is not communistic, and in China which was not communistic at the time these data were collected. The high standard of living in the United States has often been attributed to our "free enterprise" economic system. But China, at the time the prices for this chart were taken, had a free economic system too, and India still has one.

The natural resources are plentiful in the United States, in the U.S.S.R., in China, and in India; yet they have widely differing standards of living.

This analysis shows that there are factors that have to do with poverty and plenty other



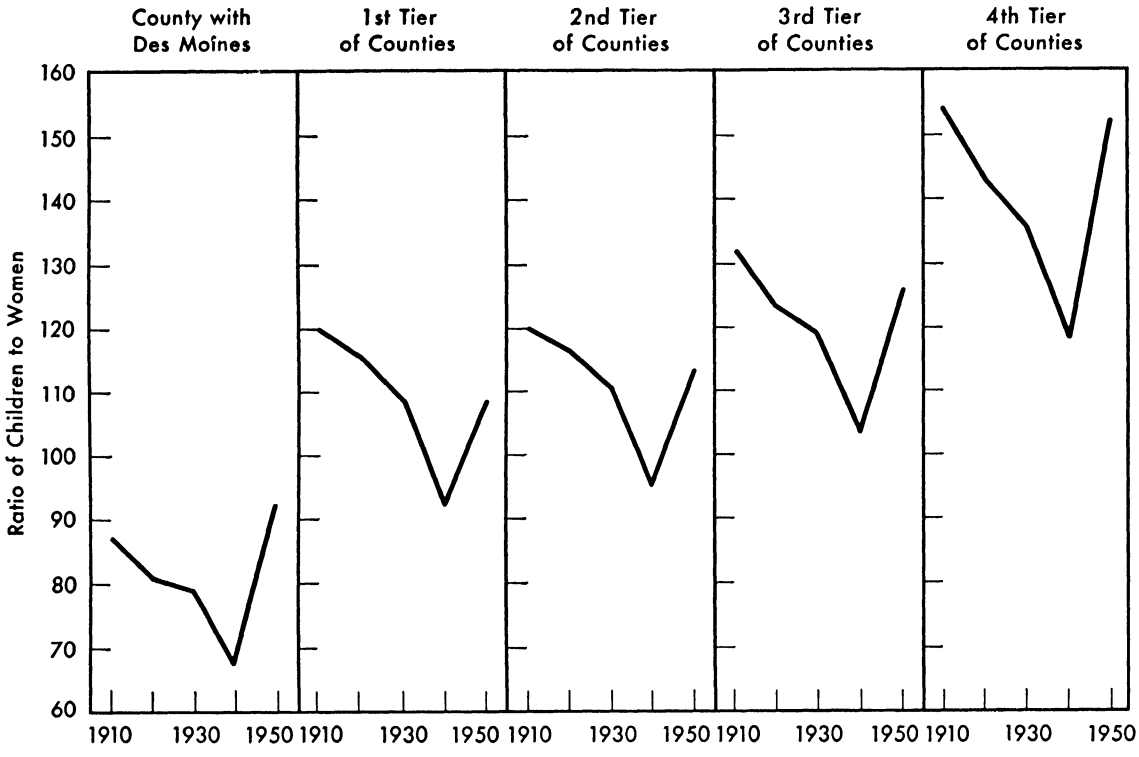
155 **Birth Rates in Selected Countries, 1751–1954**

Birth rates have been falling in Western Europe for nearly a century. This decrease is thought to be due to more efficient methods of birth control and to the growth of cities. But to the surprise of nearly everyone, they rose sharply in the 1940's, and now it is an open question whether they will rise further or continue the decline begun in the middle of the nineteenth century. The points plotted are averages of the yearly number of births per 1,000 population for each five-year interval preceding the date indicated. The Central and Western European countries are Belgium, the United Kingdom, Ireland, Finland, France, Germany, the Netherlands, Luxemburg, Norway, Sweden, and Switzerland. It was not possible to carry the index through later years to the present. The data for these countries are from R. R. Kuczynski, *The Balance of Births and Deaths,* New York, The Macmillan Company, 1928–1931. The data for the other countries are from their published statistics, except those for Sweden, which were taken from W. S. and E. S. Woytinsky, *World Population and Production,* Chapter 5. Data for the last interval shown on the chart, 1951–1954, are from the *United Nations Demographic Yearbook,* 1955.)

than population and the fruition of the earth. Any attempt to appraise the influence of population must consider also the natural resources, the state of the industrial arts, and the efficiency of the economic organization. A change in one of these factors may counteract the influence of another. The next step in our discussion concerns the birth rate, the only source of population increase for the world as a whole.

BIRTH RATES

The decreasing birth rate. For a hundred and fifty years the birth rate of Iceland was about 35 per thousand population. Iceland is mentioned because its birth records go back to 1750 and because its population was stationary until 1900, though there were fluctuations from year to year. The birth rate of the United States and of western Europe today is a little more than half that



156 **Ratio of Children Under 10 to Women 20–45 in Des Moines Area, by Tiers of Counties, 1910–1950**

Cities in general have the lowest birth rates and the smallest families. The custom of limiting family size seems to spread outward from the central big city. The counties closest to the city have smaller families than those far removed. Before 1940 the families were getting smaller, but between 1940 and 1950, they increased in size irrespective of location. The rate of increase in the 1940's was greater in Des Moines, the central city, than in the surrounding counties. (The data for 1910, 1920, and 1930 are from J. H. Kolb and E. deS. Brunner, *A Study of Rural Society*, Boston, Houghton Mifflin Company, 1946, p. 182. For 1940 and 1950 the data were compiled from the U. S. Census for these two periods.)

for Iceland before 1900; Iceland's figure then is probably about the same as the birth rate in western Europe two hundred years ago. How the birth rate has fallen in different countries of the world is shown in Figure 155.

The decline is hardly due in any significant degree to biological change in fecundity of the peoples concerned, though there may have been some slight variations due to the spread of disease or other factors. The postponement of marriage could only account for a small change in the birth rate, for the delay in marriage has not been great. In the United States, for instance, early marriages increased per 1,000 young persons between 1890 and 1930, a period when the birth rate was falling.

Influence of the diffusion of birth control information. The fall in the birth rate is due to the discovery of how to limit the size of the family, and to the spread of this knowledge.[4] The discovery of contracep-

[4] Raymond Pearl, "Fertility and Contraception in New York and Chicago," *Journal of the American Medical Association*, 108: 1385–90, April 24, 1937.

tives seems to have been made in France and to have spread to the surrounding regions, though in Stockholm in 1760 the fertility was 91 per cent of what it was in the remainder of Sweden.[5] Birth control spread first among the prosperous classes in the cities, who experienced the first decreases in birth rate.

That the custom of having smaller families spreads from the city to the farm is seen in Figure 156. It shows that the urban county in which Des Moines is located had a ratio in 1940 of 67 children under 10 years of age to 100 women 20 to 45 years of age. In the first tier of 8 counties surrounding Des Moines the ratio was 92. In the second tier of 11 counties it was 95; in the third tier of 9 counties the ratio of children was still higher, 103; and in the fourth tier of 3 counties, still farther away, it was 118. So the farther the rural county is from the urban county containing Des Moines, the larger the number of children per family. The practice of limitation of family size increased in the 30 years from 1910 to 1940 in the city county and in the farthest removed rural counties at the same rate of 23 per cent. In 1950 families were larger than in 1940 in each circle of counties. The increase was greatest, however, in the county in which Des Moines is situated, where presumably there was the greatest practice of birth control; but it is also possible that this was the county which had the greatest increase in early marriage.

The habit of limiting the size of the family spread from Western Europe outward. The movement soon reached the United States, Canada, New Zealand, and Australia. In the countries of eastern Europe, such as Yugoslavia and Poland, the birth rate is still high. It is even higher in Central and South America. These conclusions may be readily seen in Table 21.

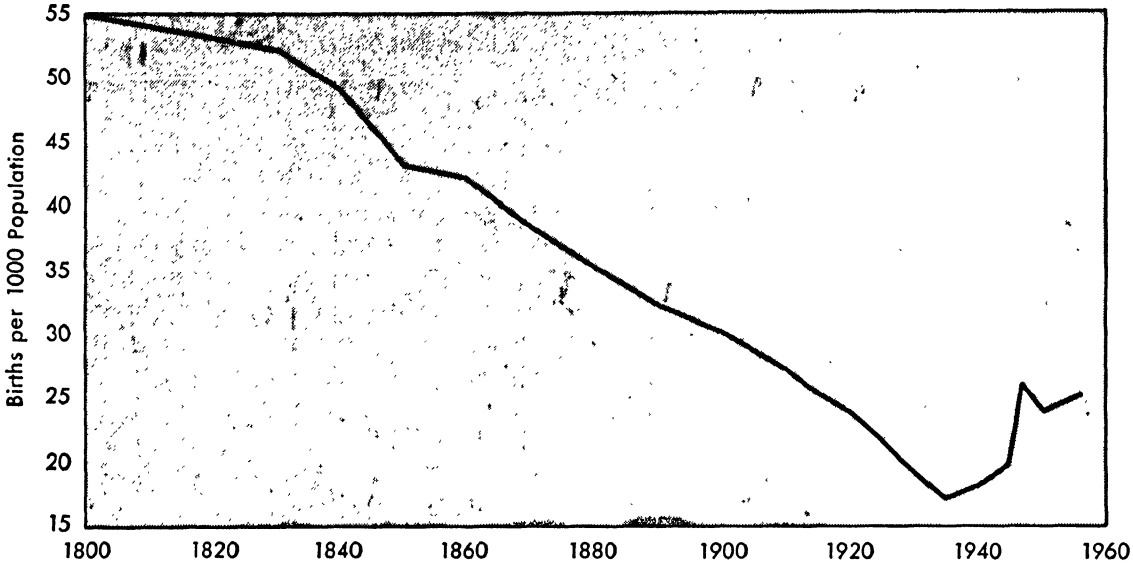
[5] A. J. Jaffe, "Urbanization and Fertility," *American Journal of Sociology*, 48: 35, July 1942.

The spread of the knowledge of how to limit the size of families has been somewhat like the diffusion of the automobile. The automobile was adopted by the well-to-do inhabitants of the cities first, then it spread to the farms and to wage earners, perhaps more rapidly than did the decline in the birth rate. Automobiles are not so numerous in eastern Europe, while in the Orient they are even scarcer. The parallel should not be carried too far. It is not cited to indicate any casual connection, but rather to show that any invention has a pattern of spread; it does not diffuse over the world instantaneously, but some classes and countries adopt it first. In a similar manner the course of the spread

Table 21 · Births per 1,000 Population in Countries in Various Situations, 1952*

Country	Rate
Sweden	15.4
Britain	15.9
West Germany	15.5
France	18.7
Italy	19.9
Spain	20.6
Ireland	21.0
Yugoslavia	28.3
Poland (1950)	30.5
Australia	22.9
United States	24.7
Japan	21.5
Ceylon	39.4
Burma	49.2
Peru	30.6
Argentina	24.6
Venezuela	46.1
Mexico	44.6
Guatemala	51.3

*United Nations, *Demographic Yearbook* (1954).



157 The Course of the Birth Rate in the United States, 1800–1956

In the United States the birth rate has been decreasing throughout its history as an independent nation. The upward trend since the 1930's would still have a long way to travel before reaching the birth rate of 1800. It is interesting to speculate whether the downward course will continue in the 1960's and 1970's, or continue upward, or flatten out. (The number of births per 1,000 population is estimated from 1800 to 1920 from the ratio of children under five years old to women 20–45 years old.)

of coffee-drinking or the use of tobacco can be traced. There are, of course, peculiar features to the spread of any invention or discovery; these features involve its cost, manufacture, localized oppositions, and the like.

To the limitation of family size there is much opposition from various sources. Some religions are opposed, on moral principles, to limitation of the number of offspring. Other groups believe that children add much to the joy of living and bring comfort and joy to old age, and hence are opposed to very small families. On the other hand, many people feel that children should be given a full education and the various opportunities of life, and therefore favor some limitation of family size unless the children can be given the advantages which modern society offers.

THE RISE IN THE BIRTH RATE

The course of the birth rate in the United States has been upward since 1934. Prior to that time for a century and a quarter, it had been downward, as shown in Figure 157. Does the recent rise mean a reversal of a long-time trend? Are there to be bigger markets than were expected, larger school attendance, more teachers needed, larger cities, more people to be fed, more employment, more children to rear per family? The best way to try to answer this question is to look for the causes of the recent increase in birth rates.

War as a cause. Soldiers who have been away for years in combat zones, on returning home raise birth rates. After the War of 1914–18, the birth rate in Western Europe rose from 17.0 per 1000 population

in the war years of 1915–19 to 23.8 in 1920–21.[6] In the United States, which was in the war for only a short time, it increased from 22.3 in 1919 to 24.2 in 1921. After the War of 1939–45, the birth rate in the United States rose from a prewar low rate (18.4 in 1936) 8.2 points to a postwar high rate of 26.6 in 1947. Rates were also raised in western Europe and elsewhere, as shown in Table 22. From this table are missing the changes in the rates for Russia, China, and Germany, for which data are not available. The rise in birth rates was not confined to countries that had sent away their young men to fight. The data in Table 22 show that countries which were not in the war and which were not occupied, as, for instance, Sweden, experienced a rise in birth rates, as did also the Roman Catholic States, Spain and Ireland, and countries remote from the arena of war such as Guatemala. The influence of war was felt in these countries through the stimulation which the demand for war supplies gave to production, and hence incomes. War influences the birth rate not only through returning soldiers but also because it brings for a time increased production and incomes and employment, except where devastation is great.

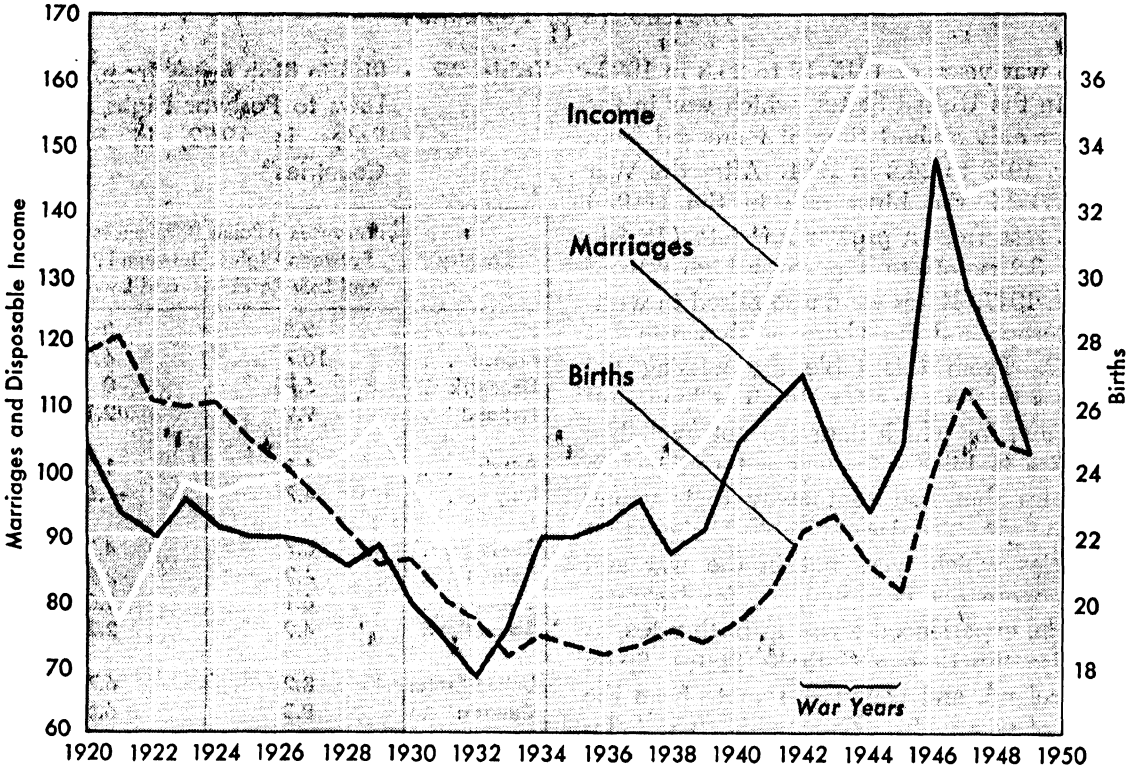
Table 22 · Rise in Birth Rates from Prewar Lows to Postwar Highs, and to Rates in 1952, in Selected Countries*

Country	Differences in Points Between High and Low Rates	Differences in Points Between 1952 Rates and Low Rates
Norway	7.3	3.3
France	10.7	6.2
Denmark	5.7	0
Holland	9.9	2.1
Britain	6.3	1.3
Italy	4.7	−.5
Spain	6.7	4.2
Ireland	4.2	2.9
Sweden	6.1	1.0
Switzerland	4.9	2.2
United States	8.2	6.7
Canada	8.3	6.5
Australia	6.0	5.7
Japan	7.7	−3.1
Mexico	2.6	.4
Guatemala	6.5	3.0

*Rate is births per 1,000 population. The prewar rate varies from 1935 to 1944. Most countries are for 1941. Postwar rate is 1945 to 1947. Data from United Nations, *Demographic Yearbook*.

Economic production increases the birth rate. Birth rates are high in times of prosperity and low in periods of economic depression, as is shown in Figure 158. In this figure the per capita disposable income (which comes from economic production and is an index of prosperity and depression) was low in the 1930's, as were birth rates. As production increased in the late thirties and forties, birth rates rose. This relationship between economic conditions and the birth rate may help to explain why the high birth rates held up better after World War II than after World War I. After the Second World War, economic production was stimulated in the United States by the Korean war and later by preparation for a possible war in the future, which brought increased income and full employment. In European countries, economic production was activated by money given and loaned by the United States under the Marshall Plan to aid recovery. Economic conditions also explain why the birth rate increased more from pre- to post-World War II than in the case of World War I. The birth rate was abnormally low in the 1930's, for those were depression years, whereas the years immediately preceding the Second World War were

[6] W. S. and E. S. Woytinsky, *World Population and Production* (New York: The Twentieth Century Fund, 1953), pp. 141–142.



158 **The Relationship of Income, the Birth Rate, and the Marriage Rate in the United States, 1920–1949**

In the figure above, income is defined as per capita disposable income in 1935–39 dollars; the marriage rate is the number of marriages per 1,000 females between the ages of 17 and 29; birth rate is the number of births per 1,000 population. The marriage rates follow rather closely the increases and decreases in per capita income, except during the war years of 1942–44, when many young men were in the armed forces. The birth rates, in turn, follow the marriage rates rather closely — after a short interval. The chart is an interesting illustration of the influence of the economic factor on love and family life.

relatively prosperous and the birth rate was not abnormally low.

The reason why prosperity increases the birth rate is sometimes thought to be the better chance of financing a child in good times than in bad. There are indications, however, that this is not a very significant reason. Rather the more important reason seems to be that prosperity increases marriage and marriage increases the birth rate. In other words, economic conditions have their influence on the birth rate largely through the marriage rate.

Increases in marriage rates cause rises in the birth rates. The birth rate moves more closely with the marriage rate than with business conditions as shown in Figure 158. The movement of the birth rate of the first born is almost identical with the movement of the marriage rate of young women 17–29, which is the age period for nearly all first marriages, as shown in Figure 159. The birth rate of the first born is much more closely associated with the marriage rate than business conditions. First-born children are about a third of all the children born, hence the birth rate of the first born has a considerable effect on the birth rate for all children.

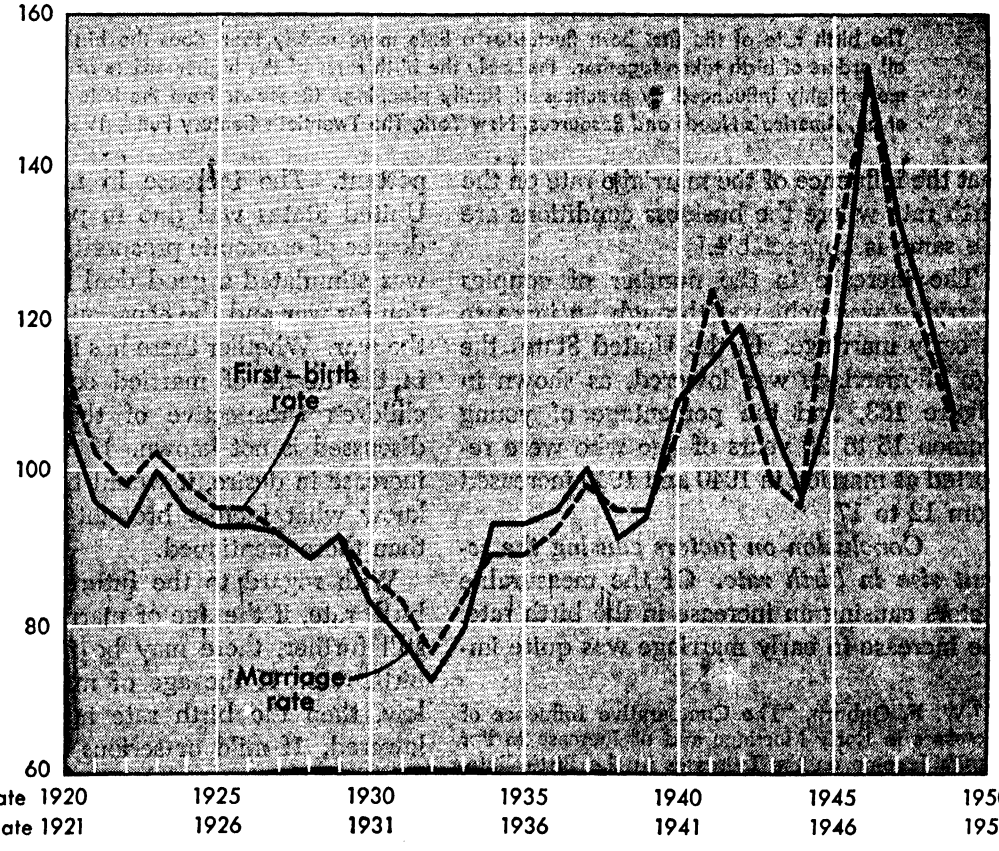
The birth rates of the second, third, and

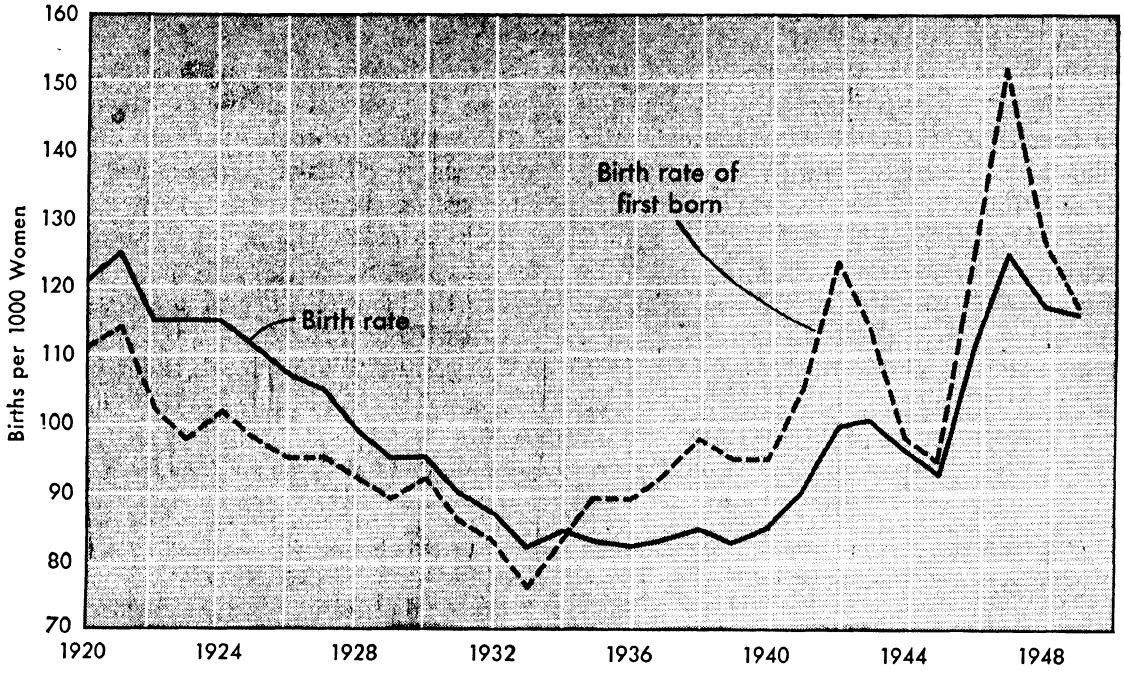
higher orders of birth as shown in Figure 161 do not follow very closely the curve of business conditions, which is approximately like the curve of the birth rate of the first born in this figure. The influence of the marriage rate on the higher orders of birth is suggested by the low points of each. The low point of the marriage rate was 1932, and the low point of the birth rate of the first born was 1933, and of the second born 1935, and of the higher orders at successively later years. The influence of the marriage rate is then clearly seen from this figure, if the lag in successive births of higher orders is taken into consideration.

No such close relationship is shown with the business cycle. It has been shown elsewhere that the influence of business conditions on the birth rate in areas where the marriage rate is the same is negligible, but

159 Marriage Rates of Women 17–29 and Birth Rates of First Born (Advanced a Year), United States, 1920–1949

The curves of the birth rate of the first born and the marriage rate are amazingly close. Most women marry for the first time after age 17 and before age 30, and few first children are borne by women over 30 years of age. This similarity in rates occurred in a period when there was presumably a widespread practice of birth control. May we infer that in spite of birth control knowledge, newly formed families wish a child soon? (Redrawn from Frederic Dewhurst *et al., America's Needs and Resources,* New York, The Twentieth Century Fund, 1955, p. 54.)





160 **Comparison of Annual Birth Rates and of Annual Birth Rates of First Born, United States, 1920–1949**

The birth rate of the first born fluctuates a little more widely than does the birth rate of all orders of birth taken together. Probably the birth rates of the higher orders of birth are more highly influenced by practices of family planning. (Redrawn from Frederic Dewhurst *et al., America's Needs and Resources,* New York, The Twentieth Century Fund, 1955, p. 56.)

that the influence of the marriage rate on the birth rate where the business conditions are the same is appreciable.[7]

The increase in the number of couples marrying was achieved through an increase in early marriage. In the United States the age of marriage was lowered, as shown in Figure 163, and the percentage of young women 15 to 20 years of age who were reported as married in 1940 and 1950 increased from 12 to 17.

Conclusion on factors causing the recent rise in birth rate. Of the measurable factors causing an increase in the birth rate, the increase in early marriage was quite important. The increase in marriage in the United States was due in part to the high degree of economic prosperity, which in turn was stimulated a good deal by the preparation for war and the economic recovery after the war. Whether there has been an increase in the desire of married couples for more children irrespective of these factors just discussed is not known. If there is such an increase in desire, it would be interesting to know what factors brought it about other than those mentioned.

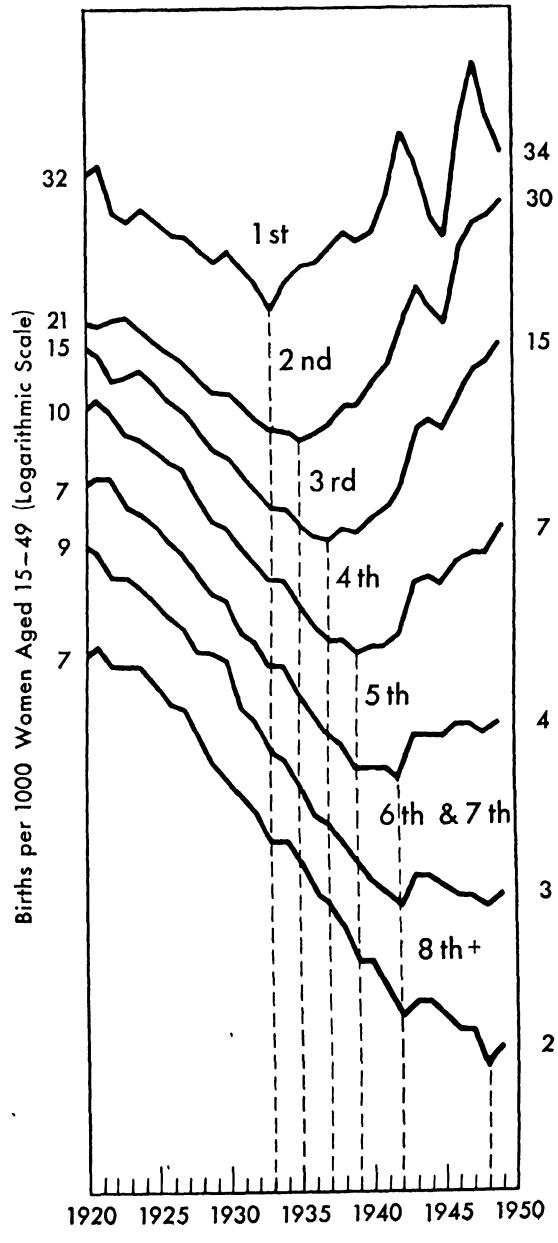
With regard to the future course of the birth rate, if the age of marriage is lowered still further, there may be increases in the birth rate. If the age of marriage remains low, then the birth rate may resist being lowered. If mild or serious depressions occur, then the marriage rate will decrease and also the birth rate.

[7] W. F. Ogburn, "The Comparative Influence of Increases in Early Marriage and of Increase in Per Capita Income on the Increases in the Birth Rate, 1940–1950." Paper read at the 1955 meeting of the International Statistical Institute, Rio de Janeiro.

The rise in the birth rate has only been around eight points, whereas the decline over the centuries has been perhaps in the United States around thirty points, as shown in Figure 157. For the birth rate to increase to its former high point, it would have to go a long way. Actually the birth rate since 1949 has been falling in the various countries of the world, less in the United States (and in France) than elsewhere.

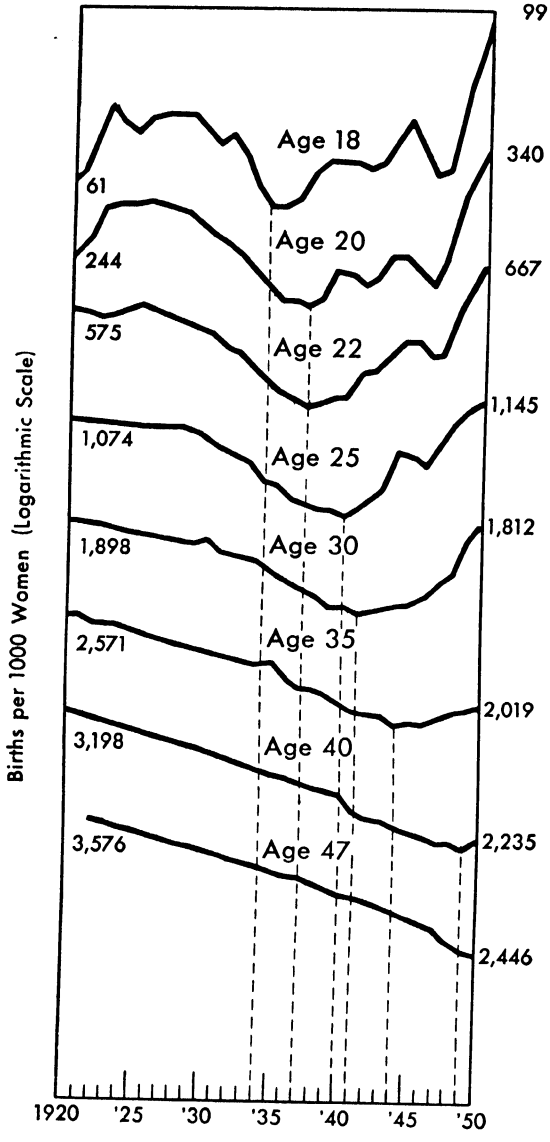
The fluctuations in birth rates per year are greater than the fluctuations of the rate of total births per lifetime, as is shown in Figure 162. The fluctuation from year to year as shown in this figure of the rates for all the children ever born to women reaching eighteen years of age is much greater than the fluctuation for women reaching the age of forty-seven who are at the end of their childbearing period. The children born to women who have reached eighteen years of age are nearly all first-born children, and the top line in Figure 162 showing this fluctuates widely between 1920 and 1949, much as does the annual rate of first born. On the other hand, the cumulative rate for women who have reached the age of forty-seven is almost a straight line, downward sloping all the way. This line, it is noted, includes the period of the great depression of the 1890's, which is not indicated by any fluctuations in the line. If women who have only three children and who space them, change their pattern and have them quickly after an early marriage, there would be a rise in the annual birth rate but no change in the cumulated rate for women reaching forty-seven, for they would all have had only three children.

In other words, an increase in first births



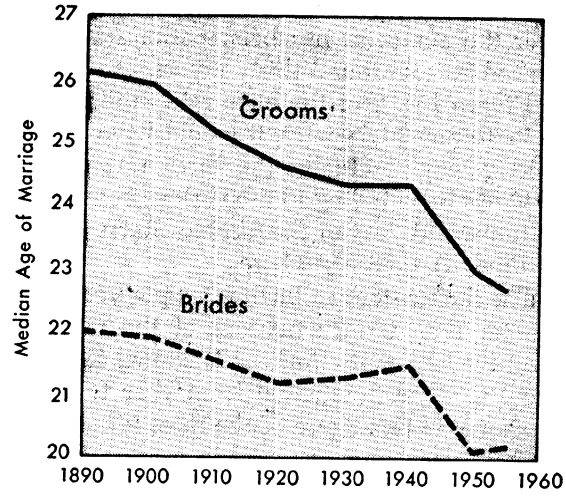
161 Annual Rates for Births of Specified Order for Women Aged 15–19 (1920–1949)

The curve of the birth rate of the first born is so nearly like the curve of per capita income that, in this chart, the top curve is assumed to be approximately the curve of the fall and rise of business conditions. The low point in the birth rate of the second-born child falls almost two years after the low point in the curve of business conditions, and the low point for the third born still later. If the marriage rate was lowest in, say, 1933, then the lowest birth rate of the second born would come two or more years later. The fluctuations in the rates of the higher orders of birth are less than those of the lower orders, which are more sensitive to business conditions. (Chart taken from P. K. Whelpton, *Cohort Fertility*, Princeton, N.J., Princeton University Press, 1954, p. 70.)



162 **Cumulative Rates for All Births Prior to Selected Ages, 1920–1950**

This figure shows that the fluctuations in the birth rate of the first born (and hence of the birth rate in general) are much greater than the fluctuations of the cumulative birth rates of all children born to women who have passed the childbearing period and hence have completed the size of their families. In other words, the fluctuation in the birth rate is much greater than the fluctuation in the size of completed families. A change in the birth rate may not mean a similarly great change in the size of completed families. (From P. K. Whelpton, *Cohort Fertility*, Princeton, N.J., Princeton University Press, 1954, p. 94.)



163 **Median Age of First Marriage of Brides and Grooms, United States, 1890–1955**

The decrease in the birth rate since 1890 would have been even greater if the age at marriage had not decreased also, for the earlier a couple marries, the greater are the chances of offspring. (Data from Paul C. Glick, *American Families*, New York, John Wiley & Sons, Inc., 1957, p. 54.)

and second births does not necessarily mean an increase in the total number of children born by the time the women reach forty-seven years of age.

The possible factor of an increase in the desire for a larger family, irrespective of the age of marriage and of economic conditions, is intangible and difficult to assess as an indicator of the future birth rate.

THE DECREASING DEATH RATE

The population of an area may suffer loss in two ways: through death and through emigration. In Iceland two hundred years ago the death rate was around 35 per thousand population, thus equaling the birth rate and maintaining a stationary population. Probably the same situation held in much of Europe at that time. But now the death rate

in western Europe and in the United States is about a fourth of this figure. The decrease in the death rate of several countries is shown in Figure 164, particularly for two countries for which data are available as far back as the beginning of the nineteenth century. The movement of the death rate is similar for other countries of the West for which there are data. The average death rate for Sweden, Norway, Denmark, England and Wales, and Scotland fell from 20 per 1,000 population in 1871–80 to 10.3 in 1950–53. For France and Belgium the decline was from 23 to 12.5; for Germany and Austria from 30 to 11.4; and for Spain and Italy from 30 to 10.2. These changes in death rates, if they could be viewed by Charles Darwin, would cause him to observe that a better adjustment has been attained between man and his environment, for the measure of adjustment for Darwin was life and that of maladjustment, death.

Causes of the lower death rate. The cause of this better adjustment is not due to any change in our biological heritage or in the natural environment. Rather the changes lie in our culture. It is our culture that has produced the discoveries which prevent the diseases that make us sick and take our lives. The mass application of these discoveries has been possible through sanitary engineering, through the dissemination of education, and through public health movements. Reduction in deaths from childhood diseases and in infant deaths occurred first. The prevention of various epidemics then followed. No great progress has yet been made in the conquest of the cardiac dangers or cancer. These remarks apply to the Western, industrialized states. In the village populations of the Far East, a later start is being made, but rapid success is expected.

Death rates at various ages. How the mortality rate has been lowered at the different ages is shown in Table 23 which gives the mortality rates at different periods throughout life, for the registration states of the United States. It shows in the first column that at the beginning of the century 162 deaths of infants occurred per thousand while fifty years later only 33 died. Childhood and youth are now relatively free from the visitation of death. High death rates begin to rise sharply after fifty-five years of age. The death rate has been lowered more in the early ages than for the years over sixty. The reason why the death rate has not been lowered as much for the older ages is the lack of success of scientific medicine in attacking the degenerative diseases.

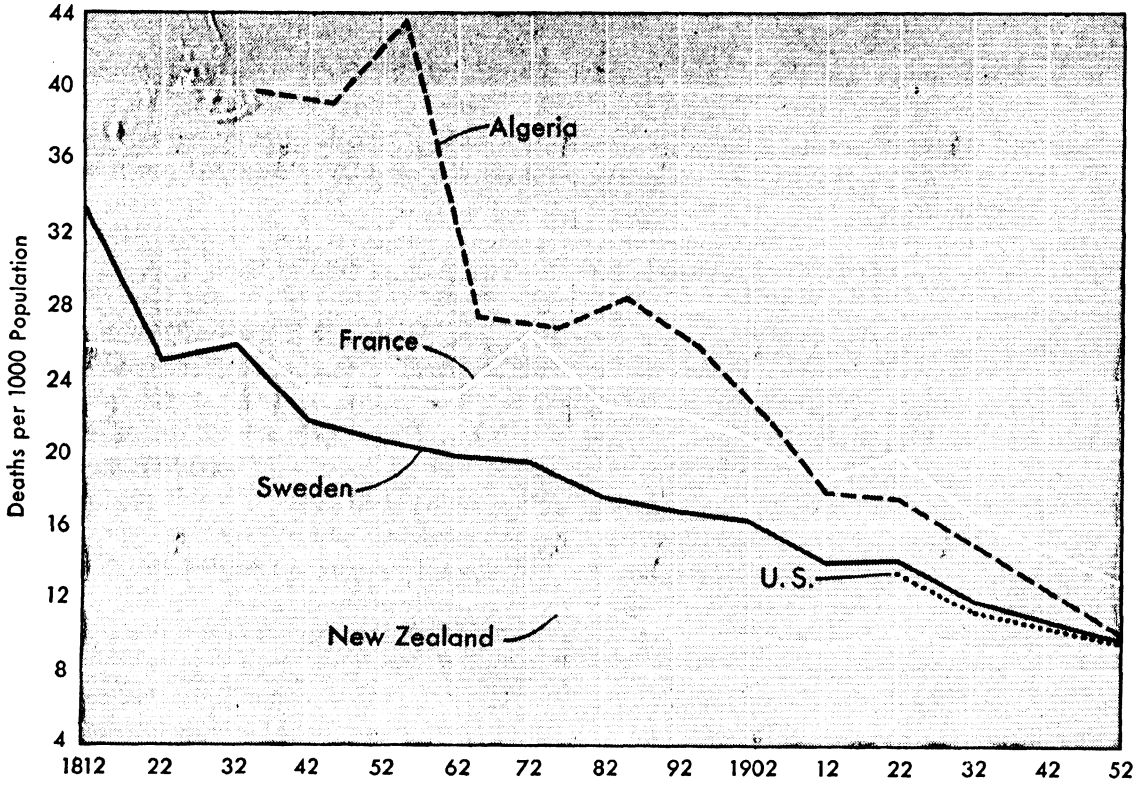
Since infancy and old age are the times in life when we are most likely to die, it follows that a community with many babies and elders will have a higher crude death rate as measured by total deaths per 1,000 total population, than a community with a large proportion of youth and middle-aged, merely because of the age distribution.

How the age distribution may vary from one community to another is shown by Figure 165 which shows for Houston, Texas, and for Pasadena, California, the percentage of the population in the various age groups. From this figure, it is seen that Houston is a

Table 23 · Death Rates by Age in the United States, 1900 and 1950*

Age Group	1900	1950
Under 1 year	162.4	33.0
1–4	19.8	1.4
5–14	3.9	.6
15–24	5.9	1.3
25–34	8.2	1.8
35–44	10.2	3.6
45–54	15.0	8.5
55–64	27.2	19.1
65–74	56.4	40.7
75–84	123.3	93.3
85 and over	260.9	202.0

*Data from United States Bureau of the Census, *Historical Statistics of the United States, 1789–1945*, p. 49, and U.S. Department of Health, Education, and Welfare, *Vital Statistics of the United States.*



164 **The Decline in Death Rates, 1812–1952**

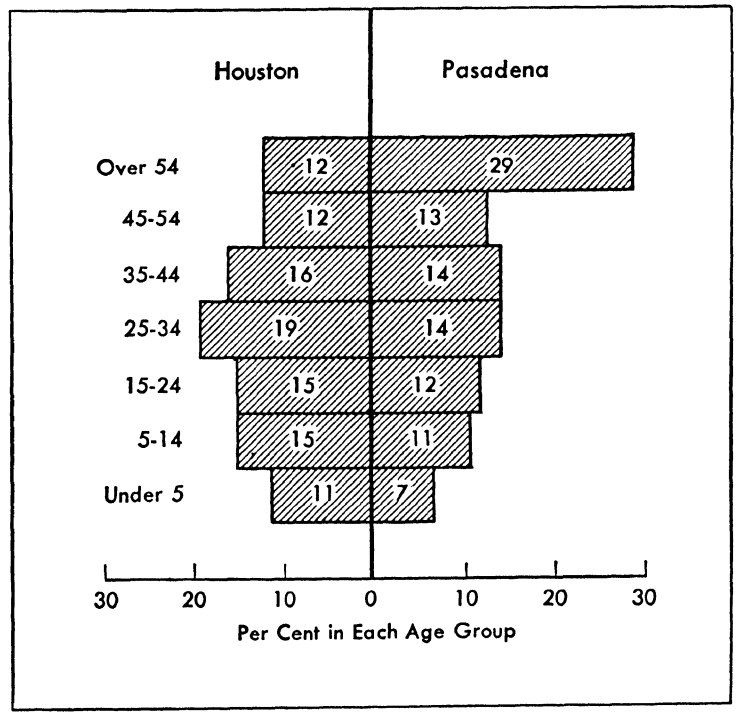
Death rates have been decreasing for a longer time than birth rates. As the gap between birth rates and death rates has widened, there has been a corresponding great increase in population. The same phenomenon is occurring in such already densely populated countries as Japan, Ceylon, and India.

city of young people, with large proportions of young and middle-aged, many of whom have migrated to this rapidly growing city. Pasadena has larger proportions of population over forty-five years of age, and is evidently a popular place for elders to live. For this reason, Pasadena should have a higher crude death rate, even if the death rate at each year of life was exactly the same as in Houston. If we assume that the death rates by age groups as shown in Table 23 are the death rates for both Pasadena and Houston (that is, if we assume they have the same death rates), then the crude death rate for Pasadena will be 14.2 per thousand, twice as large as the crude death rate for Houston, which will be 7.4. The crude death rate then will not reflect health conditions in the two cities, but only difference in age distribution, namely that Pasadena is a city of elders and Houston a city of youth.

Most cities do not have such great differences in the proportion of their population in the ages of the greatest death rates, hence the crude death rates are relatively good measures of death rates for comparative purposes. Nor are the differences in age composition of states and nations so great that they may not be compared roughly by crude death rates. Similarly the crude death rates may be compared from year to year, though over a period of a number of years, say a quarter or a half century, the age composition may have changed so much as to make

165 Age Composition of Houston and Pasadena in 1950

The fact that the death rate is higher in Pasadena than in Houston does not necessarily mean that the climate of Houston is healthier, or that public health activities are superior. Certainly one reason for the higher death rate in Pasadena is the much greater percentage of older people who live there.



comparisons by crude death rates less approximate than when they are compared from year to year.

The average length of life. When the average length of life was short, say thirty-five years in some period of history, the death rate was high; and when the people on the average live a long time, say seventy years, the death rate will be low. There are fewer funerals now than there were in earlier times, for the same sized population.

There is a numerical relationship between the death rate and the average length of life. It is measurable, when the chances of death remain the same throughout the life span and when the age distribution, that is, the percentage of old and of young, remains the same, too.[8] Then 1 divided by the average length of life is the death rate. Thus $1 \div 35$ is .0286, and the death rate is 28.6 per 1000 population; and the death rate when the average length of life is seventy is 14.3.

The actual average length of life is practically impossible for the collector of vital statistics to obtain. But it is possible to get for any one year the average length of life that the babies born that year will live, if the chances of death remain the same as they are in that year. This average length of life is called the average expectancy of life. This in the United States in 1953 was 68.8 years. Thus the babies born in 1953 will live, on the average, nearly threescore years and ten, if the chances of death remain throughout their life as they were in 1953. Very probably more diseases will be conquered, and the chances of death will be somewhat less. In which case these 1953 babies may on the average live longer than the traditional threescore and ten.

This average "life table" expectancy of life is obtained in the following manner. Of the babies born in 1953, say 100,000, 2,785 died, for the death rate for babies during their first year of life was 27.85 per 1,000. There would then be 97,215 survivors at age 1. In

[8] These are the conditions for the "life table" discussed in a later paragraph. It is a "life table" average length of life as compared with the actual average length of life, but usually not greatly different.

the same way, the survivors at every age through 100 years until all have died can be determined, by applying the specific death rate of 1953 to the survivors at each age. We thus have a "life table" of the babies born in 1953. From this table the average length of life can be computed; that is, the average expectancy of life, if the death rate of 1953 should continue throughout their lifetime.

With the average length of life in 1953 being 68.8 years, the death rate is the reciprocal of 68.8, or 14.5. But the actual death rate was 9.6. The reason that the actual death rate is lower than the expected death rate is that actually in 1953 there was a larger proportion of population in the healthier ages of youth and middle age than is found in the life-table population, which is a population with a "stable" age distribution. A country will have an age distribution favorable for a low death rate when it has immigration, for it is usually the young and middle-aged who migrate.

The life table as seen in Table 24 shows not only the expectancy of life at birth but at successive age periods during life. Thus a person at sixty-five, the customary age of retirement, may expect on the average to live fourteen years, that is, until he is seventy-nine years of age. At seventy-nine, the expectation of life is around six years.

The average expectancy of life at birth, and its reciprocal, the expected death rate, constitute a somewhat better comparative measure than the actual crude death rate, for they are based on a stable age distribution. Furthermore we usually compare death rates to get some idea of the "healthfulness" of communities, that is, the chance of living, for high death rates are correlated with high

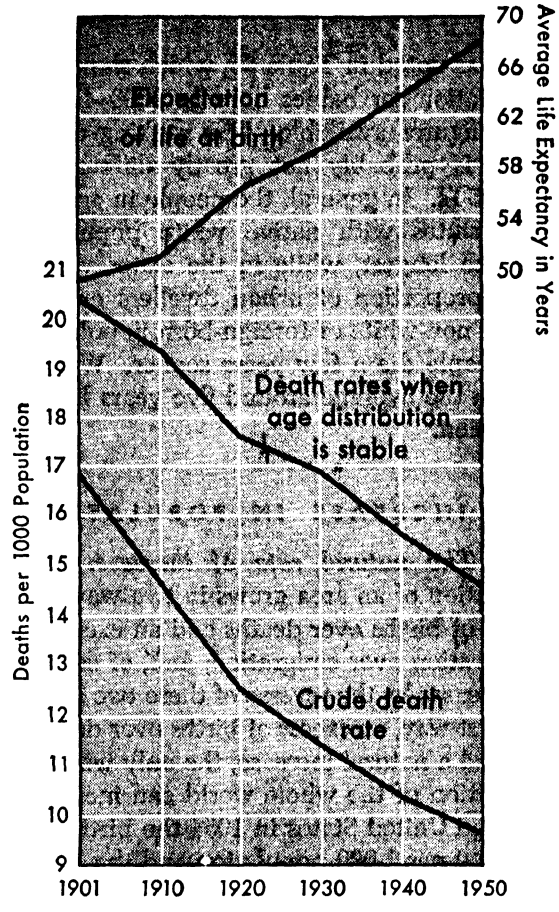
Table 24 · A Life Table of the Population of the United States in 1953

Age Interval	Number Living at Beginning of Each Age Interval	Number Dying per 1,000 During Age Interval	Average Number of Years of Life Remaining at Beginning of Age Interval
0–1	100,000	27.85	68.8
1–5	97,215	5.1	69.8
5–10	96,721	2.7	66.1
10–15	96,458	2.7	61.3
15–20	96,194	5.2	56.5
20–25	95,694	6.9	51.7
25–30	95,032	7.3	47.1
30–35	94,340	9.0	42.4
35–40	93,493	13.0	37.8
40–45	92,281	20.2	33.2
45–50	90,420	31.7	28.9
50–55	87,556	49.4	24.7
55–60	83,231	72.1	20.9
60–65	77,233	107.1	17.3
65–70	68,963	159.2	14.0
70–75	57,983	216.0	11.2
75–80	45,456	326.4	8.6
80–85	30,617	461.5	6.5
85 and over	16,487	1,000.0	5.1

sickness rates. However, the crude death rates and the "life table" death rates move rather closely together, as indicated in Figure 166, which also shows the expectation of life, for the decades for which life tables have been constructed.

An interesting illustration of how the expectation of life at birth differs from the death rate is provided by the states of Maine and Tennessee. Babies born in each of these two states in the period 1939–41 may expect to live sixty-five years, if conditions remain the same as they were in that period. The expectation of life is the same in each state. Yet the actual death rates were quite different, 12.6 in Maine and 9.9 in Tennessee. One reason why the death rate was higher in Maine than in Tennessee is that there was a smaller percentage of the population in Tennessee at ages when the hazards of life are greatest. In Tennessee in 1940, 14.4 per cent of the population was under one year and over fifty-five years old, while in Maine the percentage was 19.6. Hence Tennessee had a larger percentage at the ages of low incidence of death.

Our longer life. The extension of our stay on this fair earth is one of the great achievements of all time. The struggle to live is the great characteristic of all animal life, as Huxley observed. Among primitive peoples the great fight is against death. Some tribes have not succeeded and are no more. At the beginning of the age of metals, the expectation of life has been estimated at eighteen years, owing largely to the high infant mortality. In the Middle Ages we have somewhat better data. Then the expectation was around thirty-five years as shown in Figure 167. Today, in the middle of the twentieth century, it is about twice as long. In the United States the expectation of life at birth was 68.8 (1953), in Canada 68.6 (1950–52), in England and Wales 69.7 (1952), in France 66.3 (1950–51), in Portugal 58.0 (1948–52), and in New Zealand



166 **Comparison of Life-Table Rates with Actual Crude Death Rates for Different Periods in the United States**

The crude death rate — that is, the number of deaths per 1,000 population — varies according to the age distribution, as shown in the preceding figure on Houston and Pasadena. Yet for the United States as a whole, the course of the crude death rate has been very nearly the same as the "life-table" death rate in which the age composition is held constant. The chart also shows clearly what is already known, namely, that when the death rate is high, the average length of life is low, and when the death rate is low, the average length of life is high.

70.3 (1950–52).[9] For other countries and for very rough comparison, the crude death rate may be used.

In the United States the expectation of life is somewhat different for the various

[9] *United Nations Demographic Yearbook, 1954.*

states as noted in Table 25, which shows the expectation for babies born in 1939–41, the latest figures available. The ranking of the states is probably not greatly different in the 1950's. In general, the people in agricultural states with native white population live the longest, while in the states with a large proportion of urban dwellers or with a high non-white or foreign-born population, the people die a few years sooner. Women live on the average around five years longer than men.

Table 25 · Expectation of Life at Birth in Each of the United States for the White Male Population, 1939–1941*

Nebraska	66.2	New York	62.9
South Dakota	66.1	Wyoming	62.9
Minnesota	66.0	United States	62.8
Iowa	65.8	Montana	62.7
North Dakota	65.7	Maine	62.6
Kansas	65.6	Tennessee	62.5
Wisconsin	65.2	Florida	62.4
Arkansas	64.2	Mississippi	62.3
Oregon	64.1	North Carolina	62.3
Connecticut	64.0	Dist. of Columbia	62.2
Oklahoma	63.9	Pennsylvania	62.2
Washington	63.6	Maryland	62.0
Missouri	63.5	California	61.9
New Hampshire	63.5	Alabama	61.8
Idaho	63.4	Georgia	61.7
Indiana	63.4	West Virginia	61.7
Michigan	63.4	Colorado	61.6
Delaware	63.3	Kentucky	61.6
Rhode Island	63.3	Virginia	61.3
Massachusetts	63.2	Louisiana	61.2
Ohio	63.2	Texas	61.1
Utah	63.2	South Carolina	60.0
New Jersey	63.1	Nevada	59.0
Vermont	63.0	New Mexico	57.2
Illinois	62.9	Arizona	56.8

*From *Population Index*, April 1949, pp. 193-195. Based on tables prepared by the Statistical Bureau of the Metropolitan Life Insurance Company.

THE INCREASE IN POPULATION

The natural rate of increase. The population of an area grows in two ways, an excess of births over deaths and an excess of immigration over emigration; and, of course, it decreases by the reverse of these two flows. The first way, an excess of births over deaths, is called a natural increase, the only way the population of the whole world can increase.

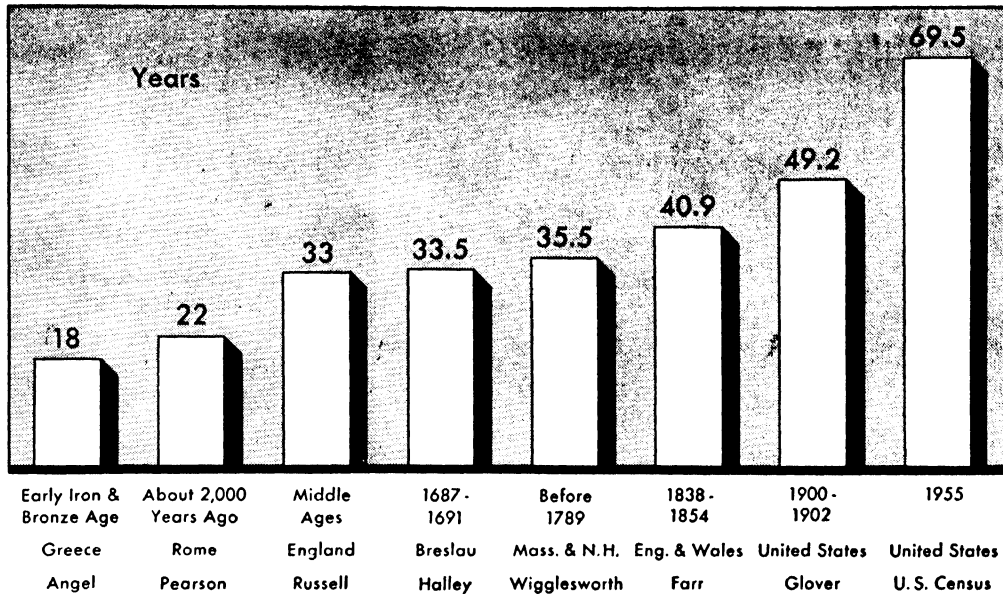
In the United States in 1954 the birth rate was 24.0 per 1,000 population and the death rate was 9.2; therefore, the rate of natural increase was 14.8, or aproximately 1.5 per cent that year. Since the population was 161,200,000, the excess of births over deaths was .0148 times this number, which is 2,500,000, approximately. The addition to the population that year was about the size of the population of the state of Maryland. Compared with the natural increase, the addition by net immigration was small, 177,000.

Part of this great growth is due to the excess of women at childbearing ages and an excess proportion of the population at ages when deaths are few.

Age distribution. This excess of population at certain ages is an excess over the population in these ages when the "age distribution is stable." This term "stable age distribution" is frequently seen in the literature; what it means can be illustrated by the population of Gary, Indiana.

When Gary was founded at the beginning of the century by the United States Steel Company for the location of its great steel works, the population consisted largely of young and middle-aged adults. At first there were few children and few elders, and most of the women were of childbearing ages. Therefore, the birth rate was very high, for the birth rate is the number of births divided by the total population. When the denominator, i.e., the total population, has few children and elders, who do not procreate, the birth rate is higher than when there are many children and elders in the denominator.

As the years passed by, many children were born, and the middle-aged population



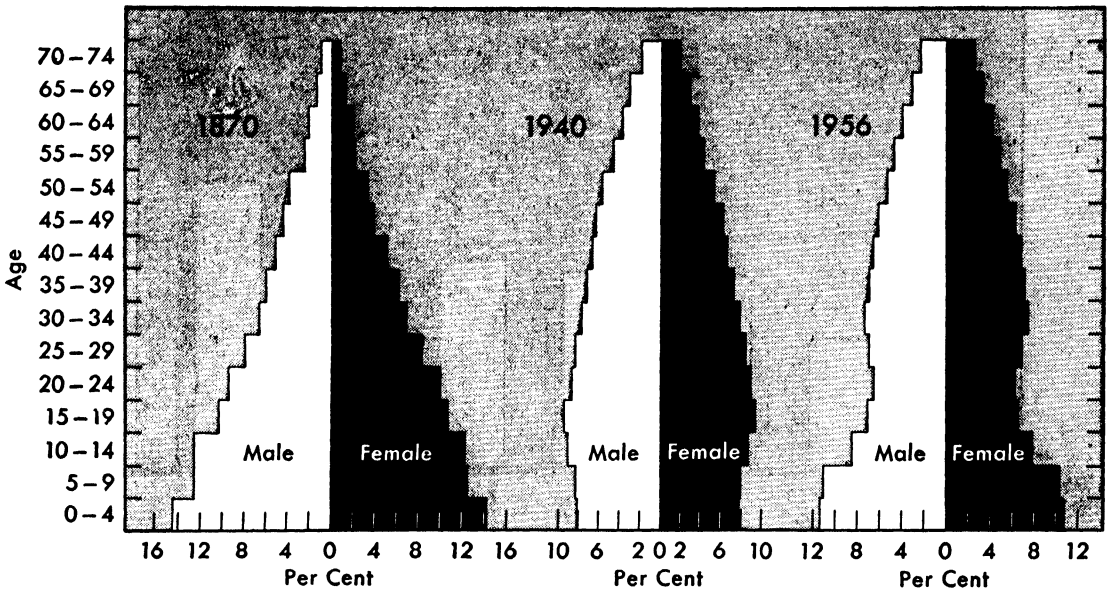
167 **Expectation of Life in Ancient Rome and in Modern United States**

Rome must have been a very unhealthful place, especially for children, for the expectation of life there was only one-half what it was in the rural provinces of the time. It is interesting to speculate about the expectation of life in the year 2000 A.D. Will it ever reach 100 and go beyond? (Sources: expectations prior to 1955 from L. Dublin, A. Lotka, and M. Spiegelman, *Length of Life*, rev. ed., New York, Ronald Press, 1949; for 1955, from *Abridged Life Tables, United States, 1955*, U.S. Department of Health, Education and Welfare, National Office of Vital Statistics, Special Reports, National Summaries, Vol. 46, No. 9, July 2, 1957. Dublin, Lotka, and Spiegelman, *op. cit.*, give the sources of each life table presented in the chart and discuss the accuracy of each. The chart carries the name of the statistician who constructed the life table from which the expectation of life is taken.)

in Gary grew to be elders. The age distribution became more normal as in most communities. The age distribution ceased changing very much and was becoming stable. It would have become quite stable if the birth and death rates of each year of life had remained the same and if there had been no migration — that is, if the proportion of babies, of children, of youth, of middle-aged, and of elders had remained the same year after year. In the beginning, then, Gary had an excess of young and middle-aged people over what it would have had later with a "stable" age distribution. The age distribution at first was favorable for a high birth rate and also a low death rate. The rate of natural increase — excess of births over deaths — was then much greater than it would be later with a stable age distribution, for then the birth rate would be lower and the death rate higher.

How age distributions differ is seen in Figure 168. Here we see first the age distribution of the population of the United States in 1870, by five-year age periods with males on the left and females on the right. The shape is like a pyramid. So common is this type of age distribution that it is called the "age pyramid." Each successive five-year period has fewer persons than the preceding.

In the 1940 distribution there are few children because of the drop in the birth rate during the twenties and thirties and a large proportion in the ages forty to fifty-five because of migration in the first quarter of the century. In 1956, there is a large percentage



168 **Age Distribution in the United States in 1870, 1940, and 1956**

A diminishing birth rate — not a stable low birth rate — makes an age distribution like that of 1940 in the United States. An influx of young immigrants has the same effect. The age distribution for 1956 shows the effect of the high birth rate since 1945. The dips in the sides of the age pyramid for 1956 will move upward in successive decades.

of children because of the high birth rate after the war.

The age distribution of rapidly growing cities is somewhat like that of the United States for 1940, chiefly because of the migrants to the city, who are usually young and middle-aged adults. When age distributions become "stable," their pattern is somewhat like that of the United States in 1870, pyramidal in shape, though with perhaps not quite so sharp a slope in the early years.

The net reproduction rate. The rate of natural increase in the United States is high partly because it has an excess of population in the ages when the death rate is low and when procreation is high, as is seen in Figure 168. With a "stable" age distribution, the rate of natural increase would be 10.7 per 1,000 population instead of the actual increase of 14.8.

These rates of natural increase when the age distribution is stable are important measures and are frequently used, but in a slightly different form. Instead of computing these rates of natural increase (or decrease) with a stable age distribution *on a yearly base*, they may be computed *on the base of a generation*, which is about twenty-seven or twenty-eight years in the United States at the present time. The population at the end of a generation may be expressed as a multiple or a fraction of the population at the beginning of the generation. This multiple or fraction is called a net reproduction rate, a measure in common use. Thus when the net reproduction rate is 1, the population at the end of a generation is the same as at the beginning and the population having a stable age distribution is stationary. If the net reproduction rate is 1.50, the population will have increased 50 per cent in a generation. If it is .90, it will have decreased by 10 per cent. A net reproduction rate, as the term implies, of 1.50 means that 100 fe-

males will leave when they die 150 females; and when the net reproduction rate is .90, 100 females will be replaced by only 90 females, assuming birth and death rates remain the same.

The net reproduction rate, though computed for a change over a period of a generation, is nevertheless calculated on the bases of birth and death rates for a particular year. It therefore fluctuates from year to year, much as do birth rates and death rates. Thus the net reproduction rate for the United States in 1950 was 1.44. That is, if the age distribution had been "stable" with the birth and death rates of 1950, the population would have increased 44 per cent in a generation. But in the late 1930's the net reproduction rate was .98, which meant a loss of 100,000 a year in population, if the age distribution had been "stable"; while actually the population was increasing, naturally, at the rate of 800,000 a year because, of course, of the excess of population in the procreating ages.

The net reproduction rates of cities are of particular interest. We know that most cities are growing rapidly, but that is partly because of a net immigration. It is also partly due to an age distribution that is favorable to a high birth rate. What we want to know is whether the cities could maintain their populations without these favorable factors. This is what the net reproduction rate tells us. Up to 1940 the cities of the United States were not maintaining their populations without these favorable factors; for the net reproduction rates were less than 1. Thus in 1935–40, 100 urban females would have been replaced by only 73 females. In 1944–49, however, the birth rates had risen; and the urban net reproduction rate in the United States was 1.19. One hundred females living in cities were being replaced by 119 females.

Though the cities are increasing by excess of births over deaths without the influence of favorable age distribution, for the first time since the beginning of the century, the farm population is increasing even more rapidly. The net reproduction rate for the rural farm population, 1.81 in 1944–49, was greater than for the urban population, 1.19, even though the farm population was decreasing. The decrease was due to outward migration. The net reproduction rates of city and of farm population were closer together than they were forty years earlier when they were 2.02 and .94. The urban population at that time, with a stable age distribution, was decreasing at the rate of 6 per cent (1.00–.94) per generation. That is, 100 females would be replaced only by 94 females.

Different rates of change, compared. Three measures of population change, that is, decrease or increase, have been described. One is the difference between the actual crude annual birth and death rates and is called the natural rate. Another is the annual natural rate for a "stable" age distribution. The third is the net reproduction rate which shows, after subtracting 1, the rate of change over a generation. These rates are compared in Table 26, which shows each for several different countries. There is a wide variation among different countries. Ceylon's population is increasing at nearly 3 per cent (2.85) a year, and by 99 per cent (or nearly doubling) in a generation when the age distribution is stable. One hundred females in Ceylon will be replaced by 199 females. The birth rates have all risen while the death rates have not in these countries in the past decade, hence their increases are greater than they were a decade or more earlier.

THE FUTURE POPULATION

In the United States. Forecasting the future population of the United States has several uncertainties. The main uncertainty

Table 26 · Three Different Rates of Population Increase for Selected Countries in 1952 or 1953*

Country	Annual Natural Rate per 1,000 Population	Annual Natural Rate per 1,000 Population, "Stable" Age Distribution	Net Reproduction Rate
Great Britain	4.5	.4	1.01
Sweden	5.7	.7	1.02
France	7.1	8.5	1.25
Japan	12.6	9.3	1.29
U.S.A.	15.0	10.7	1.56
Israel (Jewish Population)	23.9	21.7	1.79
Ceylon	28.5	26.4	1.99

*Data from United Nations, *Demographic Yearbook*.

concerns the future birth rate. The change in the death rates in the near future is not likely to be particularly great. About immigration, the attitude at the present seems to be opposed to permitting very much immigration, and there are few indications that this attitude will change soon. The birth rate has changed radically and unexpectedly. For many decades it has been decreasing; but since the middle 1930's, there was a prolonged if fluctuating rise, with a tendency in the last few years to stay high. The causes of this rise were discussed in the first part of this chapter.

In view of this uncertainty about the future of the birth rate, the projection of the curve of population growth in the United States has been made by the United States Bureau of the Census [10] on the basis of four different hypotheses about the future birth rate. These four hypotheses are derived from different ideas about the future course of the birth rate. The first is that the birth rate of 1954–55 will remain constant to 1975. This yields the largest result, a population of 228 million in 1975. The fertility level of 1950–53 remaining constant until 1975 gives the next highest result of 222 million. If the 1950–53 levels remain constant until 1965 and then decline to prewar level, the expected population in 1975 is 215 million. The lowest projection is 207 million, based on the assumption that the 1950–53 levels of fertility will decrease linearly to 1975. The projections of the United States population to 1975 range then from 228 million to 207 million.

The population growth in the United States in the past, and the projected growth in the future according to these four assumptions, are shown in Figure 170. The projections are made for only a short time ahead; for by 1975 the babies born in 1955 will be only twenty years of age and will live three

169 Population Growth in the United States

The time intervals are based on averages over a period just prior to 1956. Data supplied by the Bureau of the Census.

1 birth every 8 seconds

1 death every 21 seconds

1 immigrant every 2 minutes

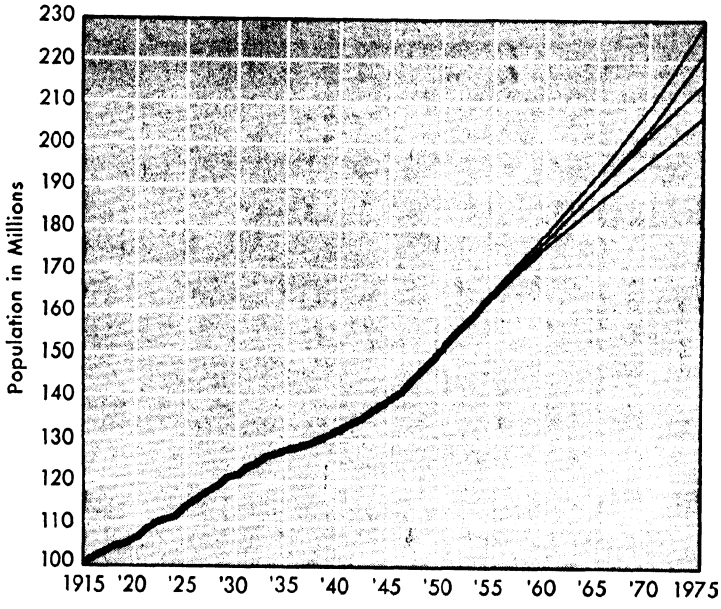
1 emigrant every 24 minutes

Net gain: 1 person every 12 seconds

[10] U.S. Bureau of the Census, *Current Population Reports*, Series P–25, No. 123, October 20, 1955.

170 The Growth of Population in the United States, Past and Future, 1915–1975

The population of the United States projected to 1975 varies from 228 million to 207 million. The variations depend upon several assumptions regarding the course of the birth rate (discussed in the accompanying text). These projections could be affected by changes in immigration policy. If the projections were carried to the year 2000 the error in them would be still greater. (Data from *U.S. Statistical Abstract* and from *Current Population Reports*, Series P-25, No. 123, October 20, 1955.)



times that long. For longer periods the projections are less accurate. Still the period is long enough to know that more schools and school teachers will be needed, and that there will be a greater market for youngsters' clothing, for cigarettes, and for soft drinks.

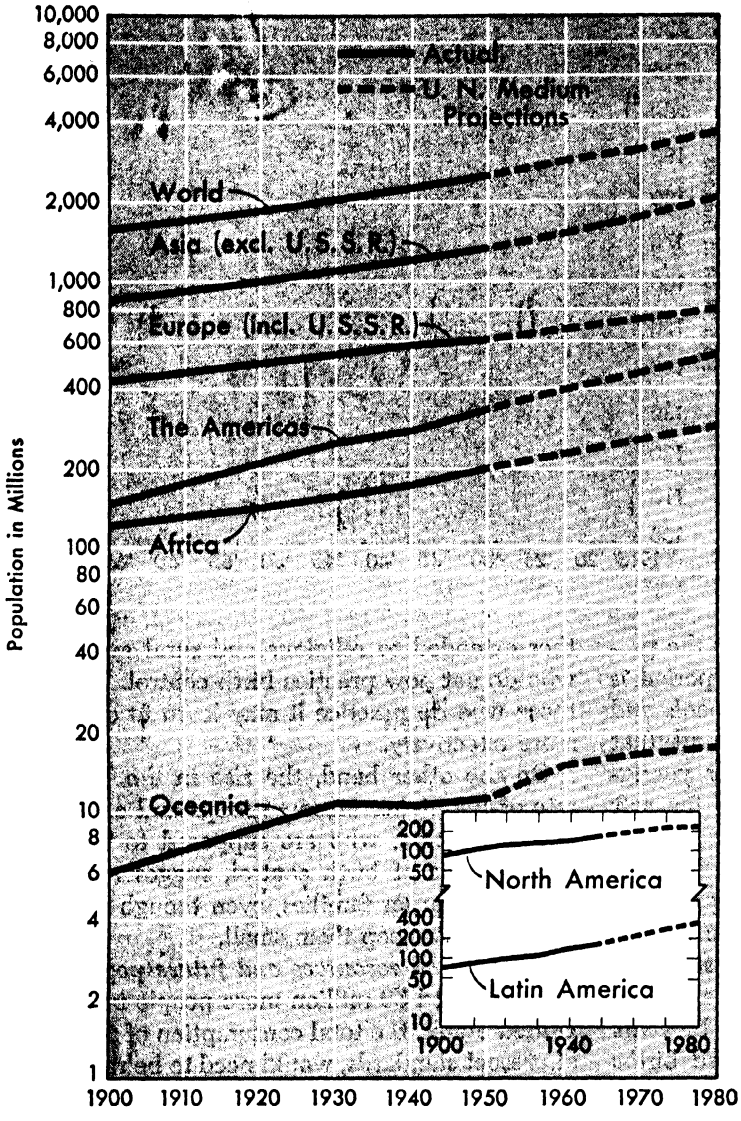
In considering which projection is most likely to occur, the factors affecting the rise and fall of the birth rate should be considered. These were discussed in the first part of this chapter. In this connection it is well to remember that the births calculated by years fluctuate much more than cumulated births calculated over the whole fertility period of the female. It is possible that the young married couples after the war are having their babies earlier than in former years when the babies were spaced out further, although there also may be more children born by the end of the fertility period.

What happens to the marriage rate will be important in determining the future births; for the influence of prosperity seems to operate very little on the birth rate of the third- and fourth-born children, and its influence on the birth rate is largely through the marriage rate. Another factor is the diffusion of birth control practices. These may be further extended to religious and rural groups who do not now practice birth control. Also those who do practice it may learn to do so more effectively.

On the other hand, the rise in the birth rate of the higher income groups and of the city population, who are supposed to have a knowledge of birth control, suggests that they want larger families, even though they know how to keep them small.

Natural resources and future population. To feed 50 million more people in the United States, the total consumption of food, at present standards, would need to be raised by 30 per cent. There is little doubt that this can be done. The supply of inanimate energy used in industry and on farms should be adequate with an abundant coal supply and with energy coming from uranium and thorium. Forests are adequate. No critical shortage in the supply of iron is expected in the next thirty years, though we now import a good deal of iron. Other metals are already inadequate; but these may be had by import, international conditions remaining favorable.

In 1950 "we were wholly or almost wholly dependent on foreign countries for tin, nickel, asbestos, chromite, columbium, beryl,



171 World Population Projections to 1980

Estimates of the future population of the world are important especially because of the drain on natural resources and also because population increase affects the standard of living, which all peoples want to be higher. The growth curve for Asia is significant because about half the world's population lives there. The projections for Asia show a good deal of expected growth in the 1970's. (Redrawn from a chart supplied by the Office of Population Research, Princeton University.)

cobalt, diamonds, and quartz. Between half and three quarters of our total consumption of bauxite, lead, and mercury was supplied by imports. And foreign countries supplied us with a fifth to a half of our requirements for magnesium, tungsten, fluorspar, copper, and zinc." [11]

The problem is not wholly one of getting enough energy and metals to get along, or of enough food to eat. We want not only to maintain our plane of living but to raise it and to do so without too great a rise in costs.

The future population of the world. The projection of the curve of the world population growth into the future is best done for a few large areas of the world with similar demographic characteristics. These demographic characteristics are the way in which the birth rates and death rates are increasing.

The course run by these rates in the past for, say, Western Europe has been somewhat as follows. The birth rates and death rates were about the same from year to year, and

[11] J. Frederic Dewhurst and Associates, *America's Needs and Resources* (New York: The Twentieth Century Fund, 1955).

Table 27 · Estimates of Populations of the World and of the Separate Continents for 1950 and 1980, According to "High," "Medium," and "Low" Expectations*

Continent	1950 (Millions)	Population Projections for 1980 (Millions)		
		High	Medium	Low
World	2,454	3,990	3,628	3,295
Africa	198	327	289	255
America	330	577	535	487
North of Mexico	(168)	(240)	(223)	(207)
South of the U.S.	(162)	(337)	(312)	(280)
Asia	1,320	2,227	2,011	1,816
Europe	593	840	776	721
Oceania	13	19.2	17.5	16.1

*Source: *Proceedings of the World Population Conference, 1954*, p. 77.

hence the growth of population was negligible. Then the death rate decreased more or less rapidly with little change in birth rate, and the population increased more or less rapidly. Then the decrease in the death rate slowed, and the birth rate continued to decrease until it approximated the death rate and the population tended to become approximately stationary again.

There are few countries in the world with records of birth and death where the birth rate equals the death rate. Where records are kept on vital statistics, there is likely to be some modern control over contagion and infection. The populations of most such countries are increasing at a low rate. Their death rates are expected to decrease a good deal earlier than their birth rates do. The gap between the birth rate and the death rate is expected to widen. Hence a great increase of population is probable. Much of the vast population of Asia has this high growth potential, as do also parts of Africa and South America.

In other areas, such as Eastern Europe, the gap between births and deaths appears to have ceased becoming greater, and a narrowing seems to be ahead. In countries in this transitional phase, there should be a slowing up of growth.

In some countries of Western Europe the gap between births and deaths is almost closed and perhaps would be but for a temporary age distribution favorable to a high birth and low death rate. In such countries a stationary or very slow rate of growth is looked for.

The Population Division of the United Nations has made projections to 1980 of the different demographic areas of the world. These are shown in Figure 171 and in Table 27. Somewhat common demographic characteristics are found in Europe, North America, and Oceania, and these regions will grow at the slowest rate annually, about 9 per 1,000 population. The fastest growing area, with a rate of 22, is Latin America. Africa seems to be growing at slightly less than the rate for the world as a whole, which is 15. These rates are median rates among three calculated rates, the others being high and low. The median rate is an increase of 50 per cent in thirty years. The projected world population for 1980 yielded by the three rates are:

Low	3,330,000,000
Median	3,600,000,000
High	4,000,000,000

By 1980, Europe will have a smaller proportion of the world's population than she had in 1950, dropping from 24 per cent to

21 per cent, while Asia's proportion will have increased from 54 to 55 per cent and the Americas from 13 to 15 per cent, assuming the median projections are an accurate forecast.

These projections are much affected by the expected growth of those great masses of people in Asia and Latin America, where the fall in the death rate is starting but where there is little evidence of a decline in the birth rate. In the past the fall in the birth rate has lagged far behind the fall in the death rate. Such may be the case in the future. However, it does not appear to be inevitable that this should be so. The technology involved in a decrease in the birth rate is much less complicated and costly than is the case with the death rate. But though an earlier or synchronous fall in the birth rate is possible, we have no evidence that it will happen. Experience points in the direction of an earlier decrease in the death rate, which gives a push to population growth.

The careful projector of population growth curves does not like to go beyond, say, thirty years. We would like to know what the population of the world will be throughout the lifetime of our children, say, until the year 2035. But the error in a projection for so long a period is quite great, even assuming no great devastating wars. We would particularly like to know whether our children and grandchildren will be hungry or have to live on an inferior diet, and whether there will be enough gasoline to run their automobiles.

World resources and the support of population. A billion more people than the earth now contains is the expectancy for the next twenty-five or thirty years. Can they be fed, and can their plane of living be maintained or raised? It will be most difficult in the densely populated areas of Asia, where over a billion people now live. The intake of food is now low there, about 2,200 calories as compared with 3,200 in North America, where, too, the diet is superior in minerals, vitamins, and amino acids. Technical writers on the subject of food and population generally agree that the knowledge exists to produce and distribute adequate food for a 50-per-cent increase in population. The difficulty is rather the practical one of changing the habits and agricultural practices of such a vast population in remote rural areas in thirty years time. Such a task is herculean if not impossible. It is also likely that the demand for better diets will be greater. It would be easier to improve the diet of the world's population if it remained the same as now, than to do so when 1,200,000,000 more are added. Science can blueprint vast increases in food supply by fertilizing the ocean and harvesting the food therefrom, by growing food in sand and water, and by utilizing chlorophyl as a factory for producing starches, fats, and proteins; but to move from blueprints actually to putting palatable food in the mouths of a vast population scattered over the world is an undertaking now immeasurable in time, costs, and effort.

Resources other than food. In the villages in China and India, probably 70 or 80 per cent of the income of a family goes for food. In the United States the percentage is 30. The remainder of the income is spent for products that come from fuels, other minerals, forests, and products of nature other than food. If the level of living is to rise, then the consumption of minerals and products of the earth other than food will increase faster than the consumption of food. Since all peoples want a higher standard of living, the demand for minerals is expected to increase.

The increase in the production of food proceeds at a rate not greatly different from that of the increase in population. The maximum capacity of the human stomach is only two quarts. There is, however, a tendency

to eat more meat and dairy products, which are more expensive than cereals and vegetables and are based upon a large supply of grain and fodder. In the United States the population doubled in the first half of the twentieth century; and the value of food consumed, in constant dollars, increased only a little more.[12]

While the consumption of food increases only a little faster than population, the consumption of minerals increases at a much greater rate. The curve of industrial production, based upon other products than food, goes up much faster than does the curve of agricultural production. Thus for the world, industrial production from 1938 to 1953 increased at an annual rate of 3.7 per cent, while population increased at about 1 per cent a year.[13] In the United States the mineral output in physical volume increased nearly six times in the first half of the twentieth century,[14] while the agricultural production was doubling.

The rate of production of mineral fuels has been much greater than of metals. In fact, the use of scrap iron has lessened very appreciably the drain on the mining of iron ore. The supply of energy drawn from coal, oil, and natural gas may be conserved considerably before 1980 by the production and use of atomic energy. A shortage of supply of mineral fuels is not expected by then, and possibly the costs may not rise. The supply of iron ore and bauxite, from which aluminum is made, seems adequate for a long time for the world; on the other hand, shortage of tin, lead, zinc, chrome, and copper is nearer at hand, and presents a real challenge. The industrialization of India and China, carried as far as, say, six five-year plans will take it, is likely to mean a greatly increased demand for various minerals. The variety of minerals used in alloys are drawn from many parts of the world; and the fact that various nations want to draw on this supply has important international consequences.

Looking as far ahead as 1980, we may say that although complete exhaustion of any of the important minerals of the world is not forecast, the demand is expected to increase very greatly — indeed, in many cases, as high as 100 per cent or more. This fact indicates rising costs and a struggle to obtain these minerals.

Beyond 1980, we cannot see very clearly. Nevertheless we would like at least to know something of the situation in which our grandchildren will grow up and live. It may be that the world population will continue increasing more or less as now for another century or more. The urge to procreate and the love of children, easily learned, is very powerful. Otherwise mankind would have succumbed and disappeared from the earth like the dinosaurs. It is not surprising then that the control of population growth is difficult.

As to resources, we shall have inexhaustible supplies of oxygen, nitrogen, carbon dioxide, radiation from the sun, and much cultivable soil. It looks as though we need not be greatly worried about supplies of inanimate energy in view of researches on nuclear fission, on solar radiation, and on photosynthesis. Indeed, the abundance may be much greater than now. We do have fears, though, because of a possible shortage of minerals.

The problem should not be viewed as one of the carrying capacity of the earth merely to sustain life in so many billion human bodies. We should want to provide for them a more abundant living. The adjustment we want is not merely to live but to attain a higher standard of living.

[12] U.S. Bureau of the Census, *Statistical Abstract of the United States, 1954.*

[13] Woytinsky and Woytinsky, *op. cit.*, p. 752.

[14] W. S. Woytinsky, "World Resources in Relation to Population," read at the Thirtieth Institute of the Norman Wait Harris Memorial Foundation held in Chicago in 1954.

The knowledge necessary for avoiding impending crises of imbalance between population and resources and for raising our standards of living can come from two sources, either or both of which may be needed. The first is the field of chemistry, which can create new products. The other is the knowledge of how to limit the number of offspring. To utilize both these weapons, effective social organization is a prerequisite.

SUMMARY

This chapter has been concerned with changes in population and their significance for social welfare. Malthus some years ago pointed out the danger that growth of population might exceed the food supply, resulting in a lower standard of living and human misery. Malthus did not reckon with the dynamic factor of culture. Contraception has produced a falling birth rate, easing the population pressure; and science applied to agriculture has increased the food supply. Yet Malthus did dramatize the important principle that the standard of living is determined by the relation of the size of population to resources, although he neglected the roles of effective economic organization and the state of technological knowledge.

The invention of contraception, which has made possible a falling birth rate in the principal countries of the world, was diffused first among the prosperous classes and the urban population, and is only gradually being diffused among the poor and the rural people. Recently the course of the birth rate has been reversed, and since 1933 in the United States it has been rising irregularly because of the business prosperity associated with war and preparation for war. Prosperity increased marriages, and increased marriages resulted in higher birth rates.

The death rate has been falling, principally because of the saving of lives of infants and young children. The expectancy of life has risen to about double what it was 150 years ago, a signal achievement.

The population of an area can increase by immigration or by excess of births over deaths, called a natural increase. This measure may be affected by the age distribution of the community, hence a more realistic measure, with the age distribution stable, is needed. Such a measure, computed on the basis of a generation, is the net reproduction rate, which tells the number of female offspring 100 females will leave behind. Up to 1940 United States cities were not, via births, maintaining their numbers; but in 1944–49 the urban indications were a net increase of 19 females per 100 per generation.

The projections of the population of the United States to 1975 range from 228 to 207 million, depending on different hypotheses concerning the future birth rate. For the world as a whole, an increase in population of a billion is expected during the next 25 or 30 years, raising important questions about how they are to be fed and supplied with fuels, minerals, and other products. To avoid a disparity between population and resources, help can come from scientific discovery and from the limitation of offspring, which calls for discipline and effective social organization.

QUESTIONS FOR DISCUSSION

1. What factors did Malthus overlook in formulating his famous theory, and how do they affect the theory?
2. If the knowledge of how to limit births were evenly diffused over the population, would the poor have fewer children than the rich?

3. Why has the birth rate in the United States risen since the mid-1930's? Will the rate remain high?
4. How does social organization affect the death rate?
5. What is the expectation of life at birth in your state? Why is it different from that of other states?
6. What are the limits to the expectation of life?
7. Why is the expectation of life for the city boy not so great as that for the country boy?
8. Will the spread of the mechanical power age to China, India, and Russia lead to still further increases in these immense populations? Elaborate.
9. Why is the age distribution of certain communities unstable?
10. Will the natural resources of the world be adequate to support the population in 1985?

TOPICS FOR REPORTS

1. Population policies of the Scandinavian countries.
2. Food habits and the food supply.
3. The relation of social organization and standard of living.
4. Problems in population projection.
5. The present age-composition of your community, and its social significance.
6. A study of the population changes in your community in the last twenty-five years and their social effects.

SELECTED READINGS

CHANDRASEKHAR, SRIPATI, *Hungry People and Empty Lands.* London: George Allen & Unwin Ltd., 1954.

A popular account of population pressure in Asia.

DUBLIN, LOUIS I., ALFRED J. LOTKA, and MORTIMER SPIEGELMAN, *Length of Life,* revised edition. New York: The Ronald Press Company, 1949.

This book represents science at its best in the social field, as seen on the firing line. For present purposes the chapters on the net reproduction rate, the life table, and age distribution are excellent.

GLASS, D. V., *Population Policies and Movements in Europe.* Oxford: The Clarendon Press, 1940.

Very good on vital statistics and measures of reproduction rates.

LORIMER, FRANK, ELLEN WINSTON, and LOUISE KISER, *Foundations of American Population Policy.* New York: Harper & Brothers, 1940.

A simple and clear statement of the factors affecting population policy, with consideration of what the policy should be.

LORIMER, FRANK, *Population of the Soviet Union: History and Prospects.* Geneva: League of Nations, 1946.

A later book than Notestein's (1944) and quite informative about a super-power of the future.

MALTHUS, T. R., *An Essay on the Principle of Population.* New York: The Macmillan Company, 1909.

This famous essay, from which nearly all studies of population take off, is still unsurpassed in dramatizing the problem of the relation of the standard of living to the size of population.

OSBORN, FAIRFIELD, *Our Plundered Planet.* Boston: Little, Brown & Company, 1948.

A severe indictment of the wastage of our natural resources. More important, a warning in impressive terms.

PEARL, RAYMOND, *Biology of Population Growth.* New York: Alfred A. Knopf, Inc., 1925.

With a milk bottle and fruit flies the author learned a lot about population growth. His conclusions are not particularly applicable to the United States because of the neces-

sary cultural qualifications, but they afford an excellent view of biological aspects, supplementing Malthus.

RUSSELL, SIR EDWARD J., *World Population and World Food Supplies.* London: George Allen & Unwin Ltd., 1954.

An authoritative and careful appraisal of the food resources of the different parts of the world and the population they can probably support.

SMITH, T. LYNN, *Population Analysis.* New York: McGraw-Hill Book Company, Inc., 1948.

A general book on population. A clear analysis, with very good charts.

THOMPSON, WARREN S., *Population Problems,* fourth edition. New York: McGraw-Hill Book Company, Inc., 1953.

Thompson and his colleague, Whelpton, are our most quoted authorities on the future growth of population. Thompson's material is authoritative on this general subject of the growth of population, and Whelpton's recent researches have tightened up predictions.

THOMPSON, WARREN S., *Population and Peace in the Pacific.* Chicago: The University of Chicago Press, 1946.

A second book by Thompson dealing with the problems of the Pacific, where he has traveled frequently.

United Nations Demographic Yearbook.

The only complete annual report on population changes of the different nations of the world and of the components of population variations, namely, births, deaths, and migration.

WHELPTON, P. K., *Cohort Fertility.* Princeton, N.J.: Princeton University Press, 1954.

A somewhat technical book for demographers, yet it has some valuable computations never made before which show that fluctuations in the sizes of completed families are not as great as fluctuations in the annual birth rates. Very valuable in appraising the recent increases in birth rates.

WORLD POPULATION CONFERENCE, *Proceedings.* Rome, 1954.

There are many excellent papers presented at the conference on various aspects of population change for the world as a whole and for different countries. Especially interesting are the projections of future population growth which make possible comparisons of the estimates by various experts.

WOYTINSKY, W. S. and E. S., *World Population and Production: Trends and Outlook.* New York: The Twentieth Century Fund, 1953.

Rates of growth in the past and projections into the future for the population of the world and for many countries. Also the components of population change, births, deaths, and migration, are fully presented. An interesting early chapter deals with geography, location, and natural resources, as a basis for population distribution and growth.

Part Six:

Social Institutions

Monkeys and apes do not have much social organization. They hunt food together in family bands which sometimes fight under leadership one with the other, especially over hunting territory or females.

Preliterate human groups in the hunting and food-gathering stages of culture have families, hunting parties, and recognized leaders; there are also sometimes clans, age societies, men's clubs, and ceremonial organizations in religion and in recreation.

The social organization of communities is a function of size; the larger the population the more organizations there are. In small communities with 10 to 50 families, there cannot be very many social organizations without much overlapping of membership. It is easier in such communities to have one organization with several functions than several organizations with one function each. A chess club is not needed in a band of twenty Eskimos. In modern communities of 200, there are about four or five formal social organizations; in villages of 1,000 about 15; and in cities of 50,000 there are around 400 or 500.

Social organization is also a function of the accumulation of culture. The Eskimos do not have chess clubs, for culture has not accumulated to that extent.

Social organization is also a function of the division of labor, that is, of specialized activities. Thus one area produces cotton and another makes woolens. Group specialization and division of labor depend on transportation to exchange products and services, as well as population and cultural accumulation.

As social organizations grow in number, there are more single-purpose organizations, as for instance, a baseball team. Also as social changes occur, an organization having many functions may lose some to a single-purpose organization, or functions may be transferred to another multi-purpose organization. Thus the protection against violence may be transferred from the family to the government.

Social organizations grow up or are created to do something more effectively than could otherwise be done. This efficiency is achieved by repetition, division of labor, cooperation, leadership, prestige, gregariousness, etc.

Of the social organizations there are some which have a bundle of functions and which have existed over hundreds of thousands of years and in many different cultures. These are the major social institutions, such as family, religion, and government. Other institutions may not be so widely spread over time and areas, as for instance, corporations. Social institutions usually have more than one function; thus the family has procreation, education, and production.

Associations are social organizations with a shorter history, are less widely distributed, and often have only one function or very few functions. Examples are a parent–teacher association, an athletic club, or a secret fraternal society.

Both social institutions and associations have, as subdivisions, minor social organizations, such as individual businesses, committees, or social clubs, which are even more short-lived, less widespread, and more specialized. Not all of these group organizations are face-to-face groups. Some never assemble, but the communication between members or officers and members is at long-distance.

In addition to the types of formal organization indicated, there are also various types of informal organization, such as friendships, gangs, and cliques. These develop to supply needs neglected or not fully met by the formal organizations. Thus a clique is a small selected number of congenial persons within a formal group who band together informally for fellowship and/or prestige. These informal organizations are important in all societies but particularly so in complex modern societies where formal organization is highly developed in the interests of efficiency, often at the sacrifice of human values. To achieve these personal values, informal groups develop within the formal organization.

Thus the group activities of a people over an area are organized, formally or informally, into a variety of types, and they have proliferated into large numbers. The evolution of social organizations means that modern society is very highly organized, and there is no indication that it will be any less so in the near future.

We may speculate about its meaning. Foremost is the message of efficiency. Our research and inventing are now organized. Production is in factories. Order is kept by organization, and rules and laws are made by groups. Perhaps some freedom is lost. Daniel Boone and the early scouts in the wilderness had the freedom that comes from living alone. They did not have to conform. But their accomplishments were restricted. Today we accomplish through organization. If a young person wants to do something for the world or for himself, he would do well — despite Thoreau — to join organizations and operate through them.

16

The Social Order

On a moonless starlit night, away from the illumination of cities, the sky shows millions of stars scattered across the firmament — a beautiful sight. At first, there appears to be no order among them. They seem aimlessly scattered, like the autumn leaves on a wind-blown November day. But long ago the shepherds of Greece saw that the stars formed patterns. One was that of a scorpion and was called Scorpio. Another constellation was Taurus the bull. The sailors of ancient Egypt guided their ships by the orderly course of the stars.

Indeed it is a truism to say that there is order in nature, everywhere. But in the beginning all was chaos, so the story of creation tells us. "And the earth was without form," but God brought order, first by separating light from darkness. So also the social world at times appears to be chaotic, as when a mob riots, or when there is a hysterical rush from an impending crisis; but soon leaders appear and movement is directed toward specific objects. Eventually crowds become organized. Indeed order is the rule in the social world as truly as it is in the physical world. The sociologists call society the "social order." The purpose of this chapter is to discuss the order of society.

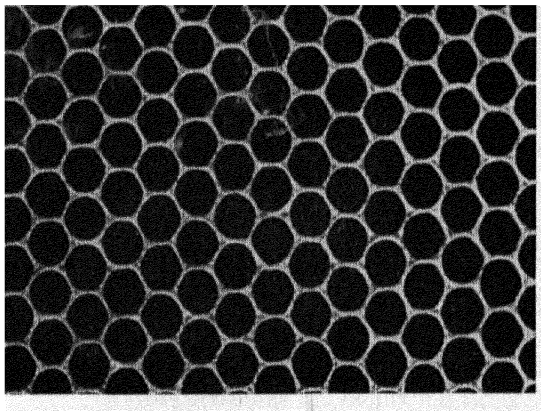
STRUCTURE AND FUNCTION

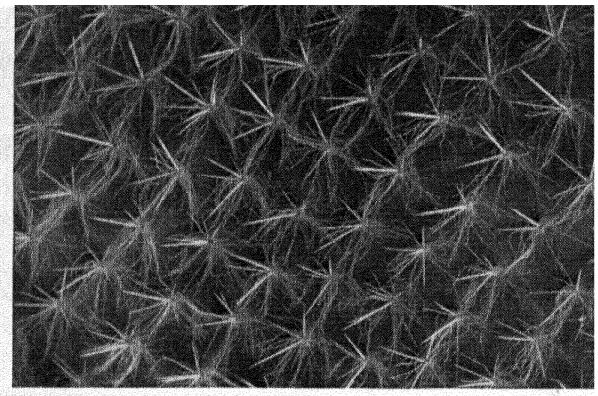
Structure is subordinate to function when the interest is in social life. Basically, order in society consists of the groupings of persons and the arrangements of their behavior. Already much of this book has been concerned with such groupings, as in the chapters on groups and communities, and with such arrangements, as in the paragraphs on folkways and social controls.

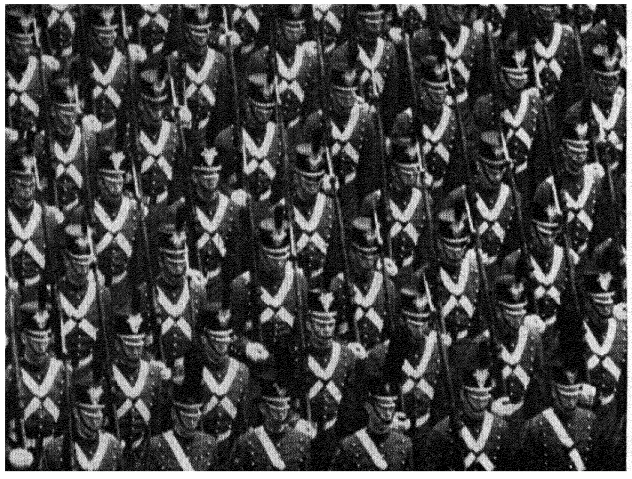
Orderliness has two fundamental aspects. One is the structure and the other is the functions performed by the structure. In society a group of persons is the structure. What the group does is the function. Both have form.

When the robins come north in the spring, they distribute themselves in pairs rather loosely, no one pair very close to another. They group in pairs, cock and hen, for mating, nest-building, and rearing of the young. The general function of the pair is to perpetuate the species. The pairs separate from each other rather widely in order that each pair can have enough space to find food for each other and for the young family. The male sits in the tree and lustily sings a war song. The function of such singing is to keep other robins from nesting near by. Perhaps also it is a song of pride in possession of a home site and a home. Robins not only sing but they fight to keep others away. Two poles of orderliness then center upon propagation and food-getting. This is true for human beings as well as for the lower animals.

Whether the function determines the structure or the structure determines the function need not detain us. Because we are







172 Order in Nature and Society

In society, as in nature, the rule is the ordered distribution of the parts. Note the almost perfect symmetry of the honeycomb, the regularly recurring pattern of the cactus, the comparable symmetry of these West Point Cadets in drill formation. Patterns in human social organization, although seldom as obvious as the ones shown here, nevertheless exist everywhere, and are clearly more than mere random groupings of social and cultural elements. (Photos of cactus and honeycomb from Wolf Strache, *Forms and Patterns in Nature*. Copyright 1956 by Pantheon Books Inc. Cadets by Flecknoe from Monkmeyer.)

interested in both anatomy and physiology, our interest lies in both structure and function. But observation seems to indicate that we have an especial concern with function. We are particularly interested in the behavior of groups. The social sciences are sometimes called the behavioral sciences. For instance, it is well to know that in the government of a city there is a city council of forty members, elected one from each ward. But we want also to know what they do. Do they vote the way the public utility company wants them to vote? Do they vote for the interests of the ethnic group of their neighborhood or for the welfare of the city as a whole? Do they vote a contract to a particular construction company because of favors received? Do they provide adequate transportation and garbage disposal? So function is especially important in social life.

ORDER IN FUNCTION

A label for established, recurrent social activity is custom. The basic unit of the functioning of social structure is the act.[1] Thus we speak of social action and of social interaction. Acts of an actor involving another person are social acts.[2] Among masses of people such social acts are repeated; and when the repetition is frequent enough, they become customs, in the same way that indi-

[1] G. H. Mead, *Mind, Self, and Society* (Chicago: The University of Chicago Press, 1934).

[2] Talcott Parsons, *Essays in Sociological Theory* (Rev. ed.; Glencoe, Ill.: The Free Press, 1954).

vidual acts, if repeated, become habits. Customs are social habits and through repetition become the basis of an order of social behavior.

There are many different names for customs depending upon the characteristic emphasized or the situation in which the custom is followed. One such term is "folkway," as, for instance, a greeting in India by palming the two hands pointing upward and a slight bow. "Folkways" has been used as a term to characterize certain minor customs among primitive or folk societies. The term is sometimes applied to certain acts of modern urban dwellers, too, as, for instance, shaking hands. The term "etiquette" is used for certain customs in "polite society" generally involving protocol. "Manners" are customs that are supposed to be based on the consideration of others in the smaller affairs of social life. "Convention" emphasizes common agreement about a custom. "Morals" are customs the departure from which is of great concern to the group, and unlike certain laws which are also customs do not always carry specific punishments. "Traditions" are customs of very long standing. "Laws," enacted by legislation, may originate customs. "Rituals" are customs having symbolic significance and emphasizing means to ends. "Ceremonies" are customs signalizing important events.

In the preceding paragraph no attempt has been made to define these terms which denote different kinds of customs. Rather, some outstanding characteristic is indicated. To most such customs, conformity is expected. Those who do not conform may expect criticism, as is discussed in the chapters on deviation and social control. The criticism may be slight, as when a costume other than white is used in a tennis tournament. Or it may be more serious, as when the protocol on seating arrangement at a state dinner is violated. Violation of laws may result in imprisonment or even death. If a man, invited to a dinner party where tails and a white tie are the custom, appears in a sport shirt, slacks, and sandals, he will not be invited again, except in Hollywood. In these several ways order is maintained in society.

For new social practices in a rapidly changing society the term "custom" is seldom used. A social practice must be in existence some time before it is called a custom. If it is only of temporary duration, we may refer to it as a fashion, or even as a fad. Thus a new dance, such as Rock and Roll, would not be called a custom. But we may say that interrupting the morning's work for a cup of coffee is becoming a custom. There is no definite rule specifying how long a practice must exist before it becomes a custom. Generally customs are of long duration, such as the custom of giving the bride a ring at the wedding ceremony.

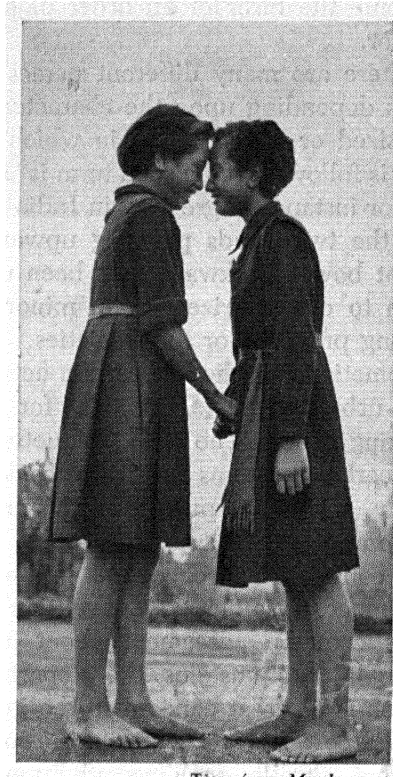
A term is needed to name new social practices. It is possible that the term "norm" may be so used, as well as to designate old practices. Norm, in popular usage, means a standard; and in statistics it means the mode, that is, the act or object of most frequent occurrence. But in both cases the implication is of failure to come up to a standard or of deviation from the mode or average. So that when one speaks of standards or modes, one is likely to be concerned also with deviations therefrom. Deviations may be of concern to society and be the subject of reprimand, punishment, or ostracism. Thus in the army a private who does not salute an officer is subject to reprimand. Moral values may therefore be attached to norms. But there may be modal practices to which no social valuation is attached. Thus in a community, most of the workers may commute from place of residence to place of work; but it makes little difference to society whether a worker rides or walks to work. There is no moral value attached.

Whether individual norms are socially



H. Armstrong Roberts

AMERICAN



Tiers from Monkmeyer

MAORI

173 Manner of Greeting

Manners, which exemplify orderly social functioning, vary from people to people. Yet it is difficult to say that one set is better than another. Any one of several customs will do equally well, provided it shows kindliness or respect. Even so, an American who greets as Indians do by palming the hands would be considered eccentric.

valued or not, norms as such are of great importance to society, for it is their adjustment one to another that makes social order. In a well-organized society the norms are articulated, as are the parts of a machine. The dovetailing of norms produces equilibrium in society.

This balance in society is disturbed by an innovation, which may later become a norm. Thus watching television disturbed the equilibrium established around motion picture theaters. Motion picture houses were closed, real estate losses occurred, programs were revised, salary scales were readjusted. But until an innovation becomes widely adopted, it cannot be said to be a norm, much less a custom. So even if we do use the term norm to designate new customs, as well as old, it will not be used to designate innovations.

ORDER IN STRUCTURE

We have been discussing the orderliness of function. There is also an orderliness of structure. There are many different terms we use to characterize this orderliness of structure, the most common being group, society, or community. Each of them implies some sort of orderly arrangement. These have been discussed in earlier chapters.

Structure in society is organization. Perhaps the most widely used descriptive term of social structure is social organization, which means an arrangement of persons



Jean L. Moussempes from Black Star

FRENCH



Balkin from Monkmeyer

JAPANESE



Press Information Bureau, Government of India

INDIAN

or of parts. There are many different kinds of social organization, such as the family, the members of a church, a political party, the personnel of a factory, an athletic team, a community, an empire, a league of nations. In all these cases there is an arrangement of persons or parts that compose the organization. Such is true even of an informal play group. This arrangement is sometimes called a pattern. The illustrations in Figure 174 are of the departments and officers in a business organization, the positions taken by the members of a football team for a particular type of play, and the disposition of the units of an army preparatory to a battle.

There are other aspects of organization. If the reader wished to organize a sociology club, a meeting would be called and a temporary president would be chosen. Somebody would have to arrange programs; so a program committee would be appointed. Notices must be sent out, and, of course, the minutes must be kept and read; so a secretary would be needed. A treasurer is useful, and the qualifications for membership must be decided upon. All this is the "constitution," which many organizations think must be written, along with a set of rules called "bylaws."

Of the various attempts to record other characteristics of social organizations, we submit Table 28, a list prepared by F. S. Chapin.

At the University of Chicago there was an

Table 28 · Type Parts of the Structure of the Major Social Institutions*

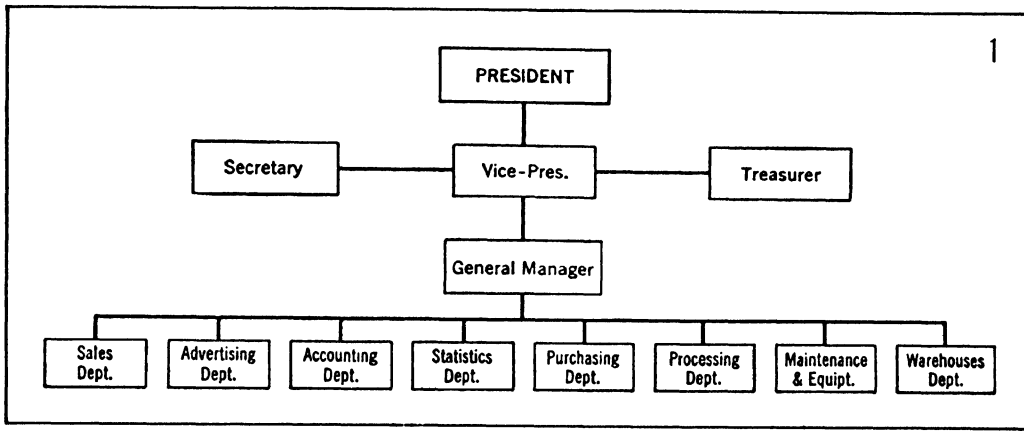
FOUR TYPE PARTS	FAMILY	CHURCH	GOVERNMENT	BUSINESS
I. ATTITUDES AND BEHAVIOR PATTERNS	Affection Love Loyalty Respect	Reverence Loyalty Fear Devotion	Subordination Cooperativeness Fear Obedience	Workmanship Thrift Cooperation Loyalty
II. SYMBOLIC CULTURE TRAITS, "SYMBOLS"	Marriage ring Crest Coat of arms Heirloom	Cross Ikon Shrine Altar	Flag Seal Emblem Anthem	Trade-mark Patent sign Emblem
III. UTILITARIAN CULTURE TRAITS (REAL PROPERTY)	Home Dwelling Furniture	Church edifice Cathedral Temple	Public buildings Public works	Shop Store Factory Office
IV. CODE OF ORAL OR WRITTEN SPECIFICATIONS	Marriage license Will Genealogy Mores	Creed Doctrine Bible Hymn	Charter Constitution Treaties Laws Ordinances	Contracts Licenses Franchises Articles of Incorporation

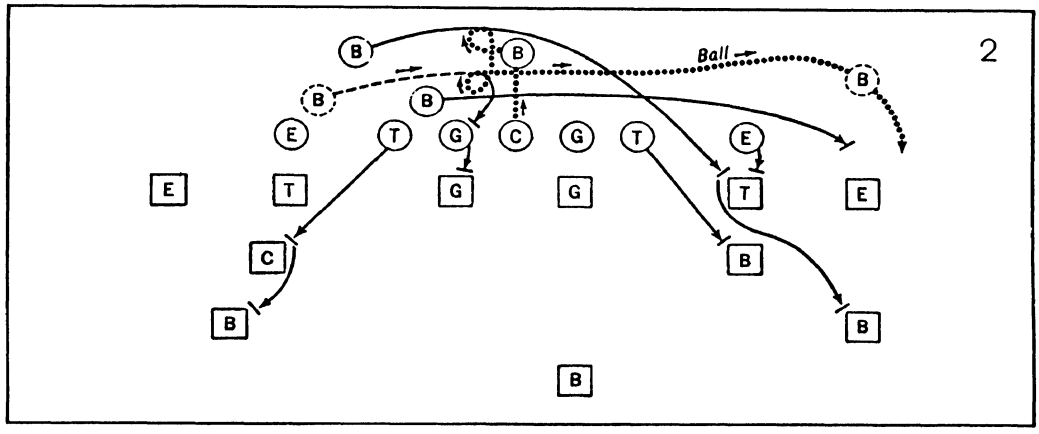
*From F. S. Chapin, *Contemporary American Institutions* (New York: Harper & Brothers, 1935), p. 16. Reprinted by permission of Harper & Brothers.

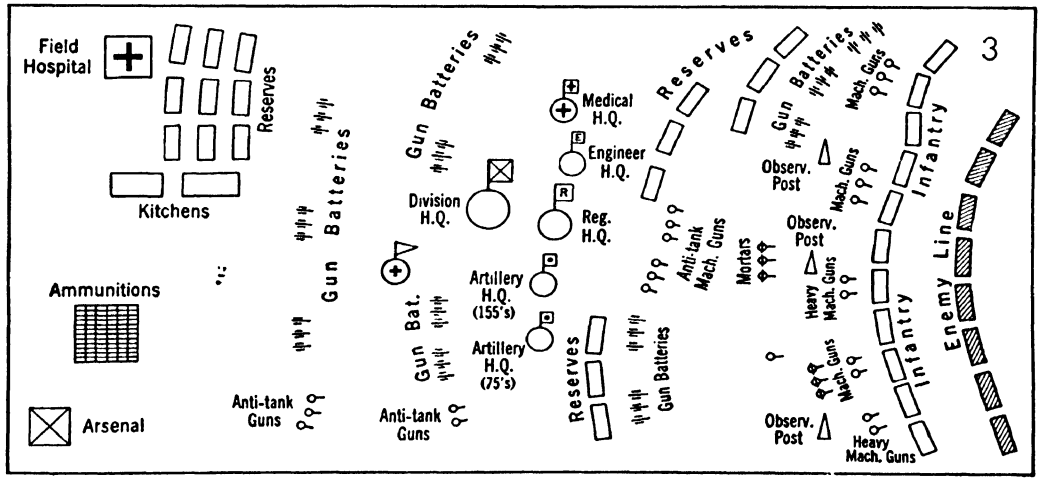
organization with the amusing name "The Chaos Club." Those attending the meetings liked to boast that there were no officers, no dues, no membership, and no constitution. Anyone could call a meeting at any time on any subject and invite anyone wanted. But the meetings were not utter chaos, and they could not escape orderliness. The meetings were always at mealtime. There was always a speaker and a chairman, and the discussions were orderly enough.

There may be many different units of an organization. The constituent units of a social organization in human society are persons. Thus the units of a parliament are human beings. But these basic units may themselves be organized into sub-units which are parts of the social organization. Thus the work of the Congress of the United States is performed through committees made up of members; there is a Committee on Foreign Relations, a Finance Committee, a Rules Committee, and so on. The work of individuals outside committees is usually rather ineffective or perfunctory as compared with these powerful committees, which determine when a bill shall be reported and when not and which report for or against a bill after more consideration than Congress as a whole can usually give. It could be claimed that the effective unit of Congress is the committee. Similarly a unit of a federation of states may be a state as well as a person. Thus the United States is composed of forty-eight states as well as 160,000,000 citizens. A nation, a state, or a city is a social organization, though each is composed of other social organizations.

There are many kinds of organizations. A state is frequently called a political organization, as is a legislative body, because it is concerned with political matters. A factory is called an economic organization, as are many other organizations engaged in production and distribution of wealth. A church is a religious organization. But they







174 Patterns of Organization

These charts illustrate how effectively people can operate under adequate organization. (1) Organization of a corporation. (2) Organization of a football play. (3) Army organization on battlefield.

are all social organizations, that is, organizations of society. A bank is a financial organization, but it is also a social organization. In a similar way a school is an educational organization, but it is also a social organization. The reader will appreciate that there are often several different uses of the same word. Thus the word "society" is used to describe a well-to-do prominent social set which gives parties, dinners, and dances, and into which a young woman makes a formal debut. But society is also quite generally an organized group of interacting individuals.

Similarly, there is more than one use of the term "social organization." In academic circles, an economist may not apply it to an economic organization but applies it to some non-economic organization, such as a family or racial organization. But the term social organization is also used quite comprehensively to designate any organization of society.

Having described the structure of the social order and its nomenclature, we wish to return to the functioning of this structure.

FUNCTIONS OF SOCIAL ORGANIZATION

Two kinds of function. The function of a social organization may be seen from two points of view. One is the relationship of the functioning of the parts of the organization to each other; and the other is the relationship of the functioning of the organization as a whole to some task other than the interaction of its members. An analogy from biology is the eye. One part of the eye, the lens, is related to the retina. If the lens is clouded, the light strikes the retina with less penetration. If the lens changes its shape, the relationship to the retina is such as to produce blurred vision of near objects or distant ones. The structure of the eye is related to the functioning of the parts. On the other hand, the functioning of the eye as a whole organ is to guide the body in motion or to enable the body to fight or to get food or to see the environment.

In a similar way the functioning of a social organization in reference to the parts that compose it may be emphasized or the functioning of the organization as a whole toward an outside goal may be stressed.

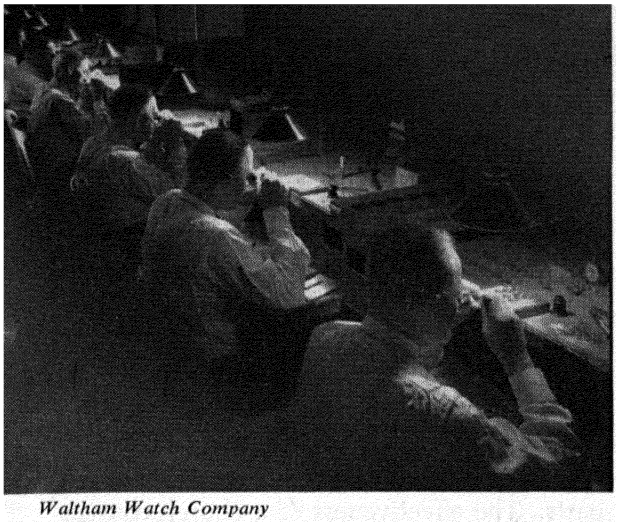
Thus in recreational organizations, such as a bridge club, the interaction of the members, that is, bridge-playing, is the main function of the club. However, it may compete in bridge tournaments and hence a function of the club as a whole is in part to win from other clubs.

In an army the function is not to entertain the soldiers but to win battles. Attention must be given to the interaction of soldiers among themselves in order to win battles, but the emphasis is on fighting the enemy or defending the country; and the interaction of the army personnel is subsidiary to this outside objective.

Among lower animals the emphasis is generally on the function of the organ as a whole to something other than the interrelation of the parts that make up the organ. The wings of a bird are for flight, and the arrangement of the feathers one with another is subsidiary to the main use of the organ as a whole, that is, flying.

Similarly in society we want to know the function of the social organization as a whole. Why is there an organization of the police force? Obviously to prevent crime, to apprehend criminals, etc., and not to promote beautiful personal relations among the men on the force.

The effectiveness of organizational achievement. We have order in society, not for the attractiveness of an orderly pattern and to avoid the formlessness of chaos and confusion. Organizations exist because they are effective in getting things done. If eleven



Waltham Watch Company



New England Mutual Life Insurance Company

175 Two Kinds of Function

A factory's main function is to produce goods for other organizations. A family's main function is to promote the welfare of its parts, i.e., members.

men want to carry a ball down the field against opposition, they can do it much better if they are organized. The Greek infantry won many victories because better than any organization of the enemy was the Grecian phalanx, a close battle formation of soldiers with shields joined and spears overlapping each other. The corporation is a better form of business organization for most large-scale production than is the partnership. Production is much greater with a division of labor under which each worker produces only a part of the product, than it would be if each of the same number of workers tried to produce the whole product.

Indeed, organization transcends the multiplication table. According to mathematics, if one person produces an amount of work equal to x, then 100 workers would be expected to produce $100x$. But if they are organized, they will produce much more, perhaps $1{,}000x$.

In this age of many organizations, the "lone wolf" has a hard time competing, or even surviving. When a student is graduated from college and wishes to be effective in his community, he would do well to work through organizations. A young person running for an elective office recognizes immediately the need of organizations — a political party, for instance, which in turn works through precinct organizations and appeals to organized groups such as labor unions, the churches, and ethnic societies.

Not all organizations are effective. Some once were but have ceased to achieve much. They persist by inertia.

Arrangement of parts. In order to be effective, an organization is dependent on the arrangement of the units that make up the organization. The T-formation is such an arrangement of football players. For a democratic government to be effective, there must be a situation in which the legislature does not hamper the executive too much. Nor in such a society does a dictatorial executive produce for long a good government.

This emphasis on the composition of an

organization and the interrelation of its units has recently led to the use of the term "social system" by sociologists.

SOCIAL SYSTEM

System is orderly arrangement. We may find an illustration of a system in the human body. The interrelationship of parts of the human body was the lifelong subject of research of Walter B. Cannon,[3] who made several dramatic discoveries, one of which was the relation of the adrenal glands to the production of blood sugar which gives the body energy. He explored the regulative mechanism that controls the flow of glucose into the blood. We know there are mechanisms that prevent the bodily temperature from fluctuating widely. These relationships of the parts of the body are a systematic arrangement — or, in other words, they constitute a system.

In another area of knowledge, Willard Gibbs,[4] distinguished United States physicist, developed the concept of a physicochemical system consisting of components made homogeneous by such factors as pressure and temperature, and he measured these relationships mathematically. L. J. Henderson, a student of physiology, and Pareto, the economist, used the concept of system as an interrelationship of parts. Recently Talcott Parsons [5] has given the concept of system currency in modern sociology. A social system may be defined as a plurality of individuals interacting with each other.[6] The interacting units are basically persons but may be groups of organizations of persons within the system. All social organizations are social systems, since they consist of interacting individuals. Until recently sociologists fared very well without much use of the word "system," for they dealt with the phenomenon as a phase of social organization; but we need a term which puts the emphasis on the arrangement and interaction of parts. The concept is important, because the effectiveness of organized activity rests upon the interaction of the parts. The effectiveness of a church consists of the harmonious relationship of the pastor or priest and the parishioners and the teachers and the children in the Sunday school and the members of Bible classes and members of committees on missions.

In a social system such as a religious organization, each of the interacting individuals has a function to perform. The pastor is the leader, preaches and assists his parishioners with problems needing spiritual or religious advice. Church members attend church and make financial contributions. When these functions are publicly recognized and appreciated, they are called roles. Each interacting individual in a social system has a role or several roles to perform.

The concept of system is quite appropriate to the family as an organization. The concern of the family is now largely with relationships between husband and wife, between parents and children, and between children, and not with economic production by the family as such, as was the situation formerly. The family is an organization in modern times that exists for the happiness, education, and welfare of its members. A

[3] Walter B. Cannon, *The Wisdom of the Human Body* (Rev. ed.; New York: W. W. Norton & Company, Inc., 1939).

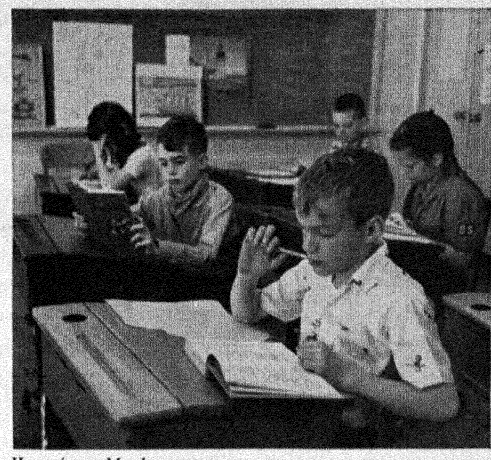
[4] Josiah Willard Gibbs, "On the Equilibrium of Heterogeneous Substances," *Transactions of the Connecticut Academy of Arts and Sciences*, 3: 108–248, 1876.

[5] Talcott Parsons, *The Social System* (Glencoe, Ill.: The Free Press, 1951).

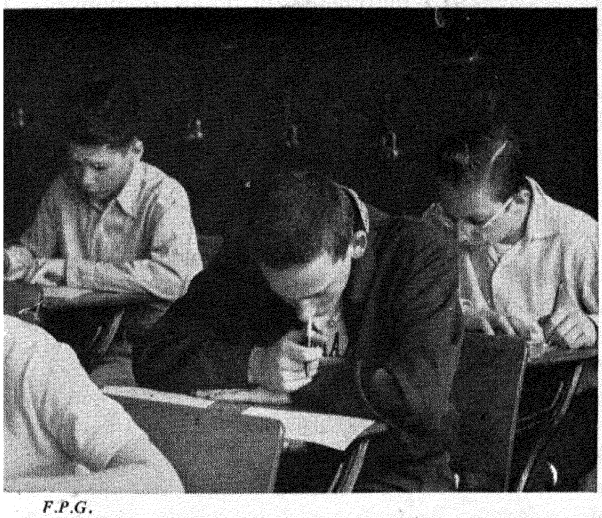
[6] This is a simplification of a definition by Parsons which is as follows: ". . . a social system consists in a plurality of individual actors interacting with each other in a situation which at least has a physical or environmental aspect, actors who are motivated in terms of a tendency to the 'optimization of gratification' and whose relation to their situations, including each other, is defined and mediated in terms of a system of culturally structured and shared symbols." *Ibid.*, pp. 5–6.



George J. Steinberg from F.P.G.

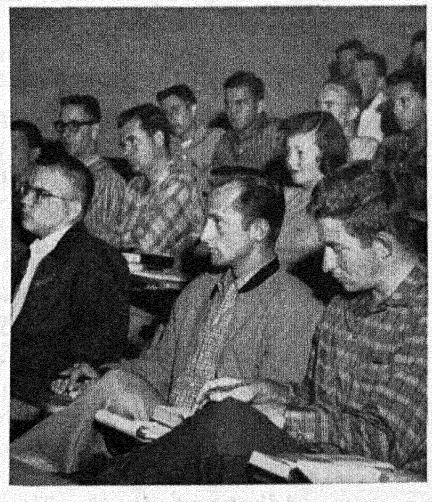


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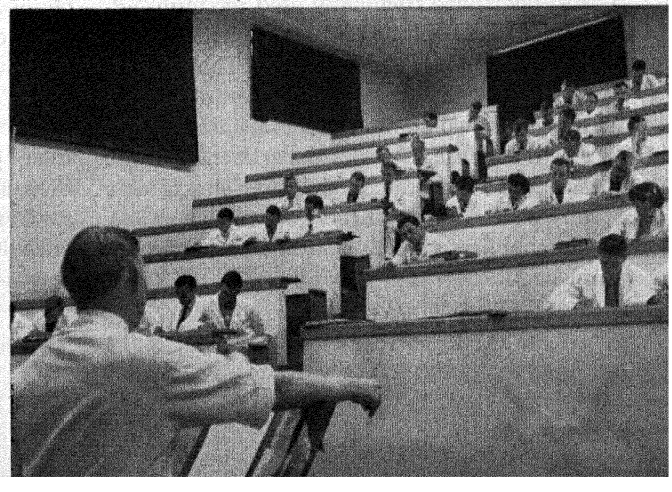
Florida State University



A Social System

Modern schools are related to one another in a social system. Thus the kindergarten, the elementary school, the high school, the college, the professional school and other schools are all interrelated in a system. A single school is also a social system, with the teachers, students, and staff all having interrelated functions.

International Harvester Company, Harvester World



marriage between bride and bridegroom of widely different ages, of December with May, generally does not work as well as when husband and wife are more nearly the same age. An only child may associate relatively too much with adults and not enough with other children. Some relationships within the family work with such antagonism as at times to break up the family. Most of the concern with the family by courts, legislators, sociologists, social workers, and preachers has been to maintain a good relationship or to improve a bad one.

Social harmony is one of several terms used to designate the relationship of parts. There are many terms to characterize the relationship of parts other than interaction and interrelationship, terms which are colorless and impersonal. The English sociologist, Leonard Hobhouse,[7] used the term "harmony" as a principle in the operation of the parts of an organization. If the musicians, as units in an orchestra, did not play in harmony, the result would be confusion and not order. Hamlet said, "The times are out of joint," that is, the different parts did not fit together, they were not in harmony. Harmonious relationships are difficult to measure or describe in situations and different values may be given them. No doubt the harmony possible in a prison is different from the expected harmony in a Sunday school class.

Adjustment of parts. The authors of this book have frequently used the term "adjustment" to characterize the functioning of the parts of a social structure. The parts of a clock are adjusted to each other; otherwise, the clock would not run. Businesses have failed because the sales department was not adjusted to production. If the streets of a city were wider or if there were not so many automobiles, there would be a better adjustment.

Equilibrium. Still another term to describe the interaction of units in a system is balance or equilibrium. Cannon's[8] study of the bodily system centered on the mechanisms for maintaining equilibrium. To this process he gave the name homeostasis. There is a balance in an orchestra among the strings, the woodwinds, and the percussion pieces. The armed forces of a country require a balance in the infantry, the armored units, the air force, and the navy. This balance varies according to the situation. In a classroom in the public schools there should be an equilibrium between the number of teachers and the number of pupils. Experience with a social system reveals a balance between units which facilitates operation. Thus a ratio of one teacher to twenty pupils has been found to work well. When a community recognizes and evaluates such a situation, the best operational ratio in view of all the circumstances becomes a norm.

The human factor affects the harmonious working of a social system. Where the units of a social system are individual persons (instead of, say, committees or departments), their interaction is complicated by personal factors such as ambition, intrigue, or animosity, because of the fact that a human being is a psychological being and not merely a cog in a machine. For instance, a factory, viewed as a social system, is not only composed of interacting departments, bureaus, and committees, such as the purchasing department, the employment bureau, etc.; but these departments and divisions are composed of human beings. Their interactions may be a help or a hindrance to production. Rivalries, dissensions over rank, jealousies over status, dictatorial actions on the part of foremen — all affect the working of the system. There may be a balance of the parts, but at the same time there may not be a harmonious relationship of the

[7] Leonard T. Hobhouse, *Social Development* (New York: Henry Holt & Company, 1924).

[8] Cannon, *op. cit.*

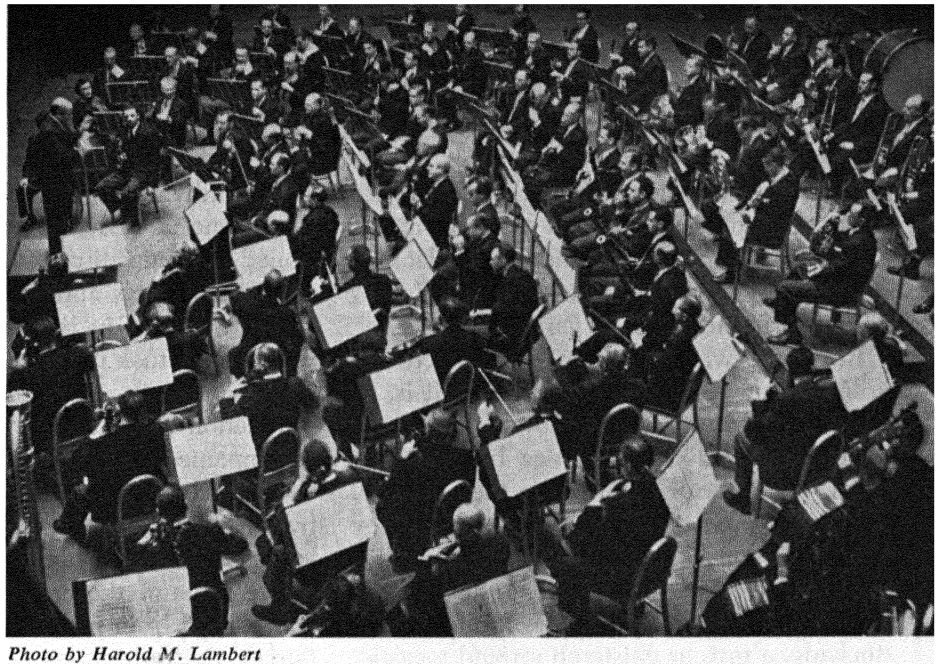
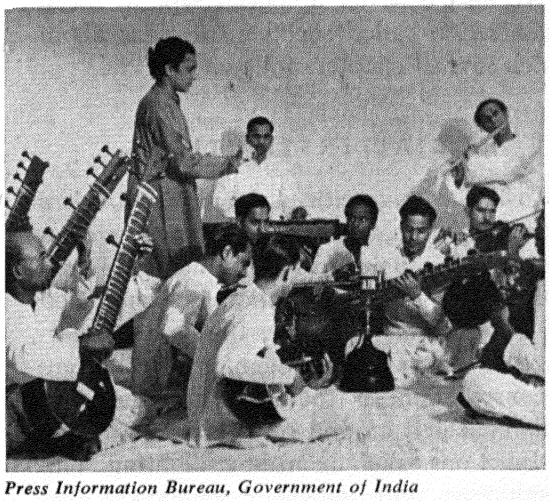


Photo by Harold M. Lambert



Press Information Bureau, Government of India

177 Balance in a Social System

A concert orchestra illustrates very well the idea of balance in a system, with the proper proportion of strings, wind, and percussion pieces. Every system aims at an equilibrium of parts, though the imbalance may be very serious in some systems. Balance is, within limits, culturally defined. Thus there may be various proportions of types of musical instruments in the orchestras of different cultures, such as China, India, Indonesia and Europe.

human units. There are various ways of handling such interaction problems. Grievance committees are one. Shifting a troublesome individual from one group to another or dismissal may help. Sociometry may solve such problems. In the chapter on economic institutions a case is cited in which the rearrangement of the seating of a work group increased production and lowered costs. A better psychological balance was attained by the rearrangement.

DISORDER

Social life is not always ordered automatically. The young readers of this chapter have lived all of their lives in an orderly society with only minor disruptions due to rapid changes or conflicts of heterogeneous groups. They, therefore, take order for granted, if they think about it at all, just as they take oxygen in the air for granted. However, exceptions are the young people

who actually resent order, as some soldiers do the discipline in the army. This resentment is particularly true of those who are rebellious from infancy, and they are many. Order to some means monotony or lack of opportunities for adventure, or denial of wishes, or domination by authority.

But those who have not experienced disorder do not realize how frustrating it is. A reading of history shows how disorderly a society can be. The Vikings brought disorder (and terror) wherever they landed. They made sea travel disorderly, for piracy was continuously present. In the early Middle Ages in Europe, the villages and little towns were quite generally located in a stockade, a fort, or clustered around a castle. So great was the disorder. The American frontier was an area where law and order were absent but greatly desired. Occasionally factories, schoolrooms, and streets become disorderly. Political and social revolutions are occasions of great disorder, as were the French and Russian and Chinese revolutions.

Where social order as described in preceding pages of this chapter is not habitual and automatic, the establishment and maintenance of order is peculiarly the function of government, as is indicated in the later chapter on governing institutions. But often governments do not work well. They may be weak, unstable, inefficient, corrupt. Some countries change their cabinets so frequently that there is not enough responsibility or stability for them to do business, especially if long-term projects or relationships are involved.

Disorder in society is the subject of two chapters which follow, "War and International Relations" and "Social Disorganization." A social system does not always function well. Order in society is an achievement to be proud of.

Change often disturbs equilibrium. A social system implies order among the interacting units of the systems. This order, be it equilibrium or harmonious relations between individuals, is likely to be disturbed, for a time at least, by social changes occasioned by innovations which force new conceptions of roles and norms. Thus the role of the husband in the family was changed when steam took production out of the home into the factory. The passing of economic production from the home to factory was accompanied by more separation and divorces. The roles of parents were disturbed by the passage of legislation against child labor and by the development of schools where some of the authority over the child was shifted from parents to teachers. Maintaining the orderliness of a social system is difficult when social changes are frequent.

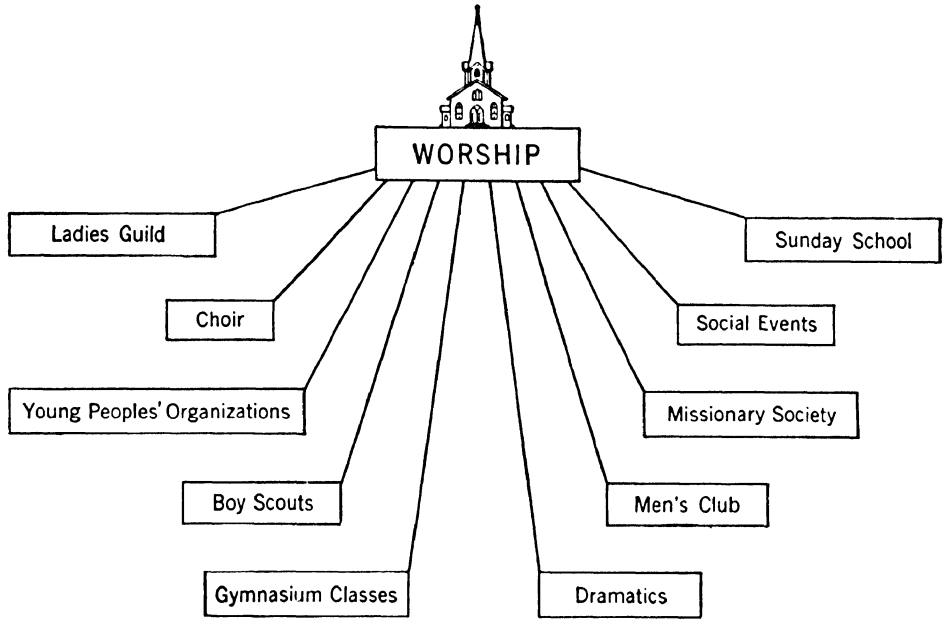
We next consider a special type of social organization called social institutions about which several chapters follow.

SOCIAL INSTITUTIONS

To the average citizen, an institution is a school, a prison, a church, or some organization that is housed in a big building. To sociologists, a social institution is exemplified by government, the jury, the family, marriage, schools, war. To them, institutions are a constellation of socially significant customs collected around some function or set of functions, such as ruling, fighting, and worshiping, and important enough to be found in various places at different times.

Social institutions are one of several types of social organization. Like all social organizations, they are social systems. Other types of social organizations are associations, crowds, and publics. There is no sharp dividing line between institutions and associations except that generally institutions are more important.

The great social institutions. There are a few social institutions that are found very widespread in all eras. These are



178 Functions of a Church

The church, a major institution, represents a cluster of functions, not just one. The major function of worship is generally found in different cultures and regions; but the correlated functions vary from place to place and from time to time.

called the great social institutions. Four of these are the subjects of chapters in this section of the book. They center upon getting food and other items of wealth, procreation, worship, and ruling. Getting a living, begetting and rearing children, believing in higher powers, and enforcing order are repetitive activities found in Babylon and in New York, among the Australian aborigines and among the Australian whites.

While these basic activities are everywhere, they differ from place to place and from time to time. Thus the ruling activities vary. Governing by the headman of the Hottentots is different from the exercise of the executive function of the president of the United States. But they both govern. The governing system is much more extensive in America than it is among the natives of Africa, and the organizations that govern are also more numerous.

There are organizations that perform these repetitive activities. The group called the family is the organization around which sex activities and child-rearing form a constellation. For the exercise of economic functions, there are the hunting party, the family, the community, the factory, the store, etc. So also there are religious and political organizations.

Other institutions. There are many other needs or desires of human beings than those of propagation, of food-getting, of worshiping, and of maintaining order that might lay claim to being similarly basic, as, for instance, the educational function. Until relatively recent times, however, there was not a special organization whose central purpose was education. The function of education either in inculcating habits in the young or in passing on traditional knowledge was an additional function of the family or of the community. Marking off a few social institutions as great or basic is, therefore, somewhat arbitrary.

We have discussed international relations

along with these basic institutions, partly because attempts to prevent disorder or to maintain order between communities, small or large, is a nearly universal function. Government, we have seen, seeks to maintain order within the group where disorder is likely to disrupt. But there has been little effective authority to govern the relations between independent political groups. Yet political groups have everywhere been in peaceful contact, and sometimes in disorderly contact, though there are peoples who have been remarkably free from war.

Other organizations. The few basic needs which the great institutions are designed to satisfy are only a tiny sample of the innumerable desires of mankind which become central activities of organizations, as, for instance, the wish to travel, the love of bestowing honors, the pleasure of collecting things for their own sake.

Furthermore in the large societies of modern times, the wishes back of the great institutions, such as the economic institutions, become specialized in particular organizations. Thus the need for purchasing gasoline at a cheaper price, or the desire to obtain legislation favorable to a particular economic interest, become central activities for special-purpose organizations.

These organizations which perform such minor and specialized functions and are not found throughout long historical periods are generally called associations.

ASSOCIATIONS

In popular usage the word "association" does not have as wide a scope as is given it by sociologists. Thus a golf club would not be called an association by the general public, nor would a literary society. Sociologists use the term as a rather general one to cover a great variety of minor social organizations, for instance, those found in the following list:

athletic clubs
garden clubs
music societies
debutante societies
bridge clubs
hobby societies
fraternal organizations

schools
forums
parent–teacher associations
literary societies
art societies
scientific societies

missionary societies
young people's religious organizations
charity societies

social work organizations
civic organizations
organized reform movements
public administration organizations
military organizations
patriotic societies
political parties

trade associations
labor unions
occupational societies
credit unions
cooperatives
farm organizations

women's organizations
youth groups
men's societies

Associations are those organizations developed around rather special interests, but as such are a part of the general picture of the orderly way in which social affairs are performed. The pursuit of these special interests quite naturally develops into associations, for organizations are efficient ways of getting these interests gratified.

In early societies. In very early stages of social evolution, we infer that there were in any one community not very many associations. For in present-day nonliterate communities of hunting peoples there are few associations, though the aborigines of Australia have a rather elaborate complex of religious customs. The Plains Indians of the United States had a rather high development of age societies. "The Hidatsa system [has] an age classification by which the male population is divided into approximately ten classes of successively higher degree, each with its distinctive dance, songs, paraphernalia and privileges."[9] There are also men's

[9] Robert H. Lowie, *Primitive Society* (New York: Boni and Liveright, 1920), p. 324.

eating clubs, and many primitive peoples have a men's clubhouse which is largely recreational in purpose. Likewise among warlike tribes there are military clubs, which are mainly prestige organizations.

Size of community affects number of associations. The reason why there are few associations in little communities is the small population of the community. For instance, if a small community of ten families with twenty-five adults had twenty-five associations, there would be much duplication of membership. The members have twenty-five interests or needs or desires, which would be met by the two or three organizations having more than the one main function. Thus the family, with propagation as its main function, also provides food, educates the children, affords protection. And the hunting band itself has not one function but several, which can be seen in its ceremonial recreations and organized hunting parties, and in games. The basic institutions in little communities have a bundle of functions.

If a community has 50,000 population, there is the possibility of many associations — say 500 — although any one inhabitant will be a member of only a very few — say, three or four — the limitation of time alone preventing a person from being active in very many associations. A person therefore should consider carefully the question of which associations to join.

That associations increase in number, the larger the community, is seen in Table 29. These are communities at the present time in the United States. Thus in a community of a population of 100 there are on the average only 3 associations, while in a community of 2,000 inhabitants there are 23. Probably many thousand are to be found in a city the size of New York. In addition to these are also many quite informal groupings, like gangs and play groups.

Single-purpose associations. When associations proliferate in this manner, a very large proportion of them are probably single-purpose organizations, such as a camera club to exhibit photographs — though even in this case the club may be educational and concerned with many aspects of photography.

Some associations exist primarily for the interaction of their members, as, for instance, an athletic club; and thus the essential characteristic is that of a social system. Other associations have as their central function the performance of a task for others who are not members, as, for instance, a missionary society that supports missions in other lands and is very little concerned with the interaction of its members or any equilibrium of

Table 29 · Number of Associations in Communities* of Different Sizes

Population of Communities	Number of Associations
100	3
200	5
300	6
400	8
500	9
700	12
900	15
1,300	20
2,000	23
6,000	85
17,000	350
42,000	450

*Associations do not include stores and factories or the major social institutions, but do include athletic, recreational, socio-religious, fraternal, political, musical, patriotic, socio-economic, social reform, rural, youth, military, and other varieties of association. The data in the main are from Edmund Brunner *et al.*, *American Agricultural Villages* (Garden City, N.Y.: Doubleday, Doran & Co., 1927), but to these have been added a score or more collected by mail from friends of the authors. All are for the United States and are for recent years. The number of cases for the communities under 1,000 is 60, and the numbers for each size of the small places are taken from a line fitted to these 60 villages. The village of 1,300 is an approximate average of 57 communities, while the size 2,000 is also an approximate average based upon 23 cases. The larger places are for one each. The numbers of associations are rounded.

parts. Other associations provide services that are of benefit to their members apart from the effects of interaction. Such, for instance, is a farmers' cooperative, which buys at a cheaper price than a single individual could do.

The increase in the number of associations. In the United States the growth of associations has been patricularly noteworthy. De Tocqueville commented on it in his book about America, based on his observations made in the 1830's.

> In no country in the world has the principle of association been more successfully used, or more unsparingly applied to a multitude of different objects, than in America. . . .
>
> Americans of all ages, all conditions, and all dispositions, constantly form associations. They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds — religious, moral, serious, futile, extensive or restricted, enormous or diminutive. The Americans make associations to give entertainments, to found establishments for education, to build inns, to construct churches, to diffuse books, to send missionaries to the antipodes; and in this manner they found hospitals, prisons, and schools. If it be proposed to advance some truth, or to foster some feeling, by the encouragement of a great example, they form a society. Wherever, at the head of some new undertaking, you see the Government in France, or a man of rank in England, in the United States you will be sure to find an association.[10]

De Tocqueville was not writing statistically but was interested in drawing a vivid picture. His report reflects a common observation of many visitors from Europe. Why the inhabitants of the United States have organized so many more associations than other countries is not known. Perhaps the reason may be that the settling of a new continent and the building of another culture by peoples who had broken old ties demanded more associations. Many American "joiners" affiliated with associations without being very active in them or knowing much about them, thus enabling a few active radicals to dominate them, and were thought "guilty by association" by investigating committees on un-American activities in the 1950's.

The Distribution of Associations

Associations are less universal and more specialized than institutions, and hence show some adaptation to the social classes. The veterans' organizations include members from all ranks of society, for the reason that war is no discriminator of persons in modern times. But many clubs and societies are exclusive. This is true of many recreational societies; birds of a feather flock together. Other special-purpose associations are likely to recruit members from the same social class, as, for instance, trade unions, scientific societies, and real estate owners' associations.

Associations are in general less common among the poor than among the rich. Money as well as time is a restricting factor. Investigators[11] found that in wealthy Westchester County, New York, during the 1920's, women with incomes under $5,000 belonged to an average of 1.9 clubs. Where the income was between $5,000 and $10,000, the number of clubs was 2.7; and over $10,000, 2.9. In Westchester 50 per cent of the women were without club membership, while in a neighboring poorer suburb, 76 per cent were members of no clubs. The southern states have fewer associations than do other sections of our country, and the South also has the lowest income of any section of the United

[10] Alexis de Tocqueville, *Democracy in America*, translated by Henry Reeve; edited with an Introduction by Henry Steele Commager (New York & London: Oxford University Press, 1947, p. 109, 319.)

[11] George Lundberg, Mirra Komarovsky, and Mary Alice McInerny, *Leisure: A Suburban Study* (New York: Columbia University Press, 1934).

Calendar of Events

Monday, Dec. 29

Lodges And Fraternities

Elmer O. Smith Lodge No. 307, F & AM — 8 p.m., Bailey hall, 5679 Park boulevard.

IOOF Pinellas Park Lodge No. 48 — 8 p.m., Fireman's hall, 60th street, one block north of Park boulevard.

Knights of Columbus — 8 p.m., 1720 Central avenue.

Social, Educational, Civic Groups

Hobby Center open — 9 a.m. to 9.30 p.m., 1400 Beach drive southeast.

Contemporary Arts gallery — 9 a.m. to 9:30 p.m., 7717 60th street north.

Art exhibit open — 10 a.m. to 8 p.m., YMCA art gallery, 116 Fifth street south.

Bartlett Park Youth Center — 1 to 4 p.m., ages 6 to 13, trampoline, bingo, free play, games, football, softball, crafts, tap dancing, singing games.

Townsend club No. 13 — 2:30 p.m., 29th avenue north and Eighteenth street.

Open Air Forum — 3 p.m., Williams Park.

South Side Improvement Association covered dish supper — 6 p.m., Glenoak school, entertainment.

Party dance — 7 to 11 p.m., Bartlett Park Youth Center, ballroom and square dance music by Don Armstrong's orchestra; party games, refreshments, free to ages 14 to 21.

Astrolite Astrology class — 7 p.m., 1011 Ninth avenue north.

Civil Air Patrol and cadets — 7-10 p.m., SPHS.

St. Petersburg Bridge League—7:15 p.m., Soreno hotel.

Model Railroad club — 7:30 p.m., upstairs, ACL station.

Beginners' group Alcoholics Anonymous — 7-8 p.m., Alanon club, 1126 Central avenue, closed meeting.

Lealman Rod and Gun club — 8 p.m., Sawgrass Lake clubhouse.

Alcoholics Anonymous — 8 p.m., Pasadena Community Church, closed panel meeting.

Little Theater workshop— 8 p.m., 1950 Second avenue north.

Ladies' Swim club — 8 p.m., YMCA, 116 Fifth street south.

SPEBSQSA Sunshine chapter — 8 p.m., City Employes clubhouse, 1300 Beach drive southeast.

Dance — 8:30 p.m., Gulfport Casino.

Tourist Societies

Connecticut Society Christmas party and luncheon — noon, International club, 145 Fourth avenue northeast.

New York Society card party — 2 p.m., Tourist Center, Third avenue south and Fourth street, open to public, free to members.

International Railway Association covered dish picnic — 5 p.m., Recreation Pier, entertainment. Bring covered dish, drink, table service.

Iowa Society annual holiday card party — 7:30 p.m., Tourist Center, open to public.

"Get Acquainted" Waltz club — 8:30 p.m., Palais Royal ballroom, Second avenue and Second street north.

Professional Organizations

Printers' Chapel Corp (International Olde Tyme Union) benefit party — 7:30 p.m., 551½ First avenue south.

Veterans' Organizations

American Legion post 14 — 8 p.m., Legion hall, Central avenue and Beach drive.

VFW Sunshine City post No. 6827 — 8 p.m., 2309 Tangerine avenue.

179 **The Profusion of Associations in America**

Shown here are the associational activities scheduled for a single day in St. Petersburg, Florida. (From *The Independent*, St. Petersburg, Monday, December 29, 1952, p. 20.)

States. The chief associations of the wage-earning class are trade unions and fraternal orders. In Middletown, 43 per cent of the working-class men were without associational affiliations, as compared with 2.6 per cent of the businessmen.[12] Lindstrom[13] found that in southern Illinois 72 per cent of the farm laborers were not members of any association, compared with 19 per cent of farm tenants and 13 per cent of farm owners.

Some associations, such as the B.P.O.E. (Elks), are rarely highly developed in the big cities, though in large towns and small cities they have a strong membership. In general, the more specialized the association, the greater the concentration of membership in the big cities. The American Bar Association offers an example. On the other hand, unspecialized women's clubs have a larger proportion of members in towns and small cities. The history of associations shows that a majority of them were first organized in larger places and later diffused to smaller places.[14] There are, of course, special rural organizations. Particularly to be noted are such youth-serving associations as the 4–H clubs and Hi–Y groups, and the socio-economic Farm Bureau, Grange, and Home Demonstration groups.

INFORMAL ORGANIZATION

Recent studies of social organization have shifted attention away from the purely formal organization of an institution or association (as represented by an organizational chart showing the lines of authority and communication) to a concern with what is often termed an "informal" organization. The latter does not appear in the organizational chart nor is it planned. Rather it is a spontaneous growth which arises wherever and whenever human beings are in contact with one another over a period of time; it is, in fact, a species of primary group, which Cooley emphasized so strongly, and is particularly noteworthy as an adjustment to, and escape from, the highly organized formal (secondary) groups, so common in modern times. An illustration is the Army[15] with its authoritarian organization demanding rigid obedience; its highly stratified social system with hierarchies of deference formally and minutely established by official regulation and subject to penalties for infraction, on or off duty. The rigidity of the formal structure is partly offset by the informal system of friendships and "buddies" that plays such an important part in sustaining morale.[16] The formal system requires deference to superiors; but when in World War II, Navy pilots were asked to name men they would most like to fly with, some squadron commanders were never mentioned, while some low-ranking officers were mentioned often. The informal organization is sometimes a spontaneous growth within the formal, and often highly essential to the effective functioning, or even to the actual survival, of the formal structure.

ORGANIZATION AND FREEDOM

An interesting question is: how does the individual fare in a highly organized society? More specifically, does organization restrict individual liberty? We have seen that society has achieved order, but has the individual thereby lost freedom?

Membership in an organization seems to

[12] Robert and Helen Lynd, *Middletown* (New York: Harcourt, Brace & Co., Inc., 1929), p. 528.

[13] D. H. Lindstrom, "Forces Affecting Participation of Farm People in Rural Organizations," *University of Illinois Bulletin 423*, p. 105.

[14] Herbert Goldhamer, unpublished manuscript.

[15] Samuel A. Stouffer *et al.*, *The American Soldier*, Vol. I (Princeton, N.J.: Princeton University Press, 1949).

[16] Edward A. Shils and Morris Janowitz, "Cohesion and Disintegration in the Wehrmacht in World War II," *Public Opinion Quarterly*, 12: 280–315, Summer 1948.

curtail some freedom of action. When young men and young women marry and form a family organization, they lose some freedom. Membership on a football team results in some restriction on liberties. Indeed the very fact that an individual is born into a group means he must respect the rights of others, and is hence not free to do as he pleases.

Organizations that have rules and required activities obviously restrict behavior, for a member who must conform cannot act in violation of that conformity. If a person is a member of an organization that has no requirements save, let us say, attendance, he loses little freedom, except that when he is attending he loses the freedom to do other things.

A hermit who is not a member of any organization is presumably free to do what he chooses, if he can. But the trouble with an individual who lives alone, as some of the pioneer trappers did much of the time, is that he does not have the opportunities of action which he would have if he lived in a group.

Group life, through organization, provides opportunities which come because of the achievements which organization brings. Daniel Boone living in a wilderness had no such opportunities as has a person living in a city. A person may willingly give up liberties in order to have the advantages of organization. For instance, an automobile driver gladly gives up the right to drive on the left side of the street, if by obeying the rule of driving on the right side, he thereby gains the advantage of greater speed with a minimal risk of head-on collision with another car.

One's appraisal of the loss of liberty through membership in an organization depends on whether the membership is voluntary or obligatory. A person may willingly go into a monastery and consider the spiritual gain as greater than the loss of liberty. But to be forced to work in a particular factory or live in some designated community during a war is a loss of liberty that may overweigh the gain in achievement.

While membership in an organization may be optional, there is often a limitation on choice, as is recognized by a person who lives in a village. Life in a metropolis has many opportunities, but it is also subject to much regulation.

The trend over the centuries has been toward increasing organization. If trends are projected into the future, the indications are for still more organization of our activities. From these will come many achievements and opportunities, but with them may come loss of freedom, even though it be voluntary.

SUMMARY

Sociologists call society "the social order" because order in society is the rule, as in nature. The order in society consists in groups of persons and the organization of their behavior. Correspondingly, there is order in structure and in function. Since structure exists primarily to perform functions, our interest lies primarily in function or behavior.

Order in function appears in custom; and the orderliness in structure inheres in organization, the patterned arrangement of persons or social groups.

Functions of social organizations are of two kinds: those having to do with the interrelationship of parts and those relating the organization as a whole to an outside goal. The test of the effectiveness of an organization is its success in achieving desired ends. Effectiveness depends on the arrangement of parts, or the social system. When there is harmony between the parts, the achievement is greater than when the parts are not in balance. A social system implies order among the interacting units of the system, but the equilibrium may be disturbed by social changes, which require reorganization.

A special tvpe of social organization is the social institution, a widespread constellation of significant customs revolving about basic functions. A few social institutions, four of which are subjects of chapters that follow, namely, economic, political, family, and religious organization, are called the great institutions because they are very extensively found in all eras. Less widespread and more specialized are the associations, which have become very common in complex modern society.

QUESTIONS FOR DISCUSSION

1. Does function determine structure, or does structure determine function?
2. Which is more important, structure or function?
3. How is social order brought out of disorder, as in the case of a rioting crowd?
4. How do customs differ from fads?
5. How do you determine whether one type of social organization is more efficient than another? Give illustrations.
6. In what type of group is the emphasis primarily on the interaction of the members? In what type is the functioning oriented mainly toward an outside goal?
7. How does the concept "social system," differ from the concept, "social order"?
8. What factors disturb the balance of a social system?
9. What is the warrant for designating certain social institutions as "the great social institutions"?
10. In what fields has the growth of associations been particularly pronounced in recent times?

TOPICS FOR REPORTS

1. The relation of customs to social roles.
2. Make a study of an association which, though powerful in the 1920's, is weak today, and account for its decline.
3. Committees as a type of social organization.
4. Measures of organizational effectiveness.
5. A comparison of associations in preliterate and modern society.

SELECTED READINGS

CHAPIN, F. S., *Contemporary American Institutions.* New York: Harper & Brothers, 1935.
A re-examination of the structure and functions of some contemporary American institutions in the light of research. Contains interesting data on local government, politics, and business. Valuable for its effort to frame an operational definition of social institutions.

COOLEY, C. H., *Social Organization.* New York: Charles Scribner's Sons, 1909, 1929.
Part V, "Institutions," is a penetrating interpretation of the interrelationships of institutions and the individual. Abstract and somewhat philosophical.

COOLEY, C. H., *Social Process.* New York: Charles Scribner's Sons, 1922.
Chapter 2 contains the classic treatment of organization as the unconscious coordination of adaptive behavior.

DAVIS, KINGSLEY, *Human Society.* New York: The Macmillan Company, 1950.
A social system is more than the relations of the social institutions to one another. It is also an orderly relationship of individual to society. The concepts are well thought out and clearly presented in this book.

HERTZLER, J. O., *Social Institutions.* Lincoln, Nebraska: The University of Nebraska Press, 1946.

A book by a life-long student of the field. It is a thoughtful book, dealing extensively with concepts, and is for the mature student.

LOWIE, ROBERT H., *Social Organization*. New York: Rinehart & Company, Inc., 1948.
A somewhat unusual treatment because of its great scope, which extends over preliterate societies. Also notable for its accuracy and evidence.

MACIVER, R. M., and C. H. PAGE, *Society: An Introductory Analysis*. New York: Rinehart & Company, Inc., 1949.
This volume is the second revision of MacIver's earlier work, *Society: Its Structure and Changes*. An able analysis.

PARSONS, TALCOTT, *The Social System*. Glencoe, Ill.: The Free Press, 1951.
The author has re-introduced the conception of system as an orderly coordination of parts, but he treats it as a development in his theory of social action. Not a book to be read in a hammock on a summer afternoon.

SUMNER, W. G., and A. G. KELLER, *The Science of Society*. New Haven, Conn.: Yale University Press, 1927.
Volume I, Part I, gives a distinguished analysis of the role of social institutions in adjusting man to his surroundings. A threefold classification of social institutions is introduced — institutions of social self-maintenance, self-perpetuation, and self-gratification. This classification is then developed in the remainder of this book and in Volumes II and III of the series. The final Volume IV is a case book.

WILSON, WOODROW, *The State*. Boston: D. C. Heath & Company, 1898.
Order in society is not always and wholly automatic. It has in larger groups to be achieved and maintained. In this, government with or without military forces plays a central role. The author of this book later made a noble effort to achieve and maintain order in a world society. For the concept of order in society it is not necessary to read the whole book.

17

Society and the Economic Institutions

Economic needs and activities are fundamental in society. The higher apes spend nearly all their waking hours getting food. The preliterate peoples put most of their effort on getting and preparing food, too. But they also give time to making material objects such as clothing and tools. Modern men spend most of their waking hours making a living. What kind of work we do, therefore, and for whom we work have much to do with our happiness and welfare. The nature of our working life is determined for us by our economic institutions. We therefore ought to know something about them. The pursuit of a liberal education in our colleges sometimes obscures the great importance of economic activities.

The getting and spending of wealth is the subject of a vast literature, which, however, generally treats these phenomena as if they were a closed system, more or less independent of community interrelations. Sociology studies the economic institutions as a part of society.

Why economic activities are social. Economic institutions are closely interwoven with the other institutions of primitive peoples. As is shown in the first part of this chapter, with a people in a rather stationary society, such as the Eskimo or the Kwakiutl Indians, "making a living" is tied to ideas of supernatural powers, to traditional taboos, to prestige and status, to communal welfare, and to informal social pressures. Among the Hopi Indians, planting corn is accompanied by much religious and recreational ritual. The Eskimo hunter must divide the kill and distribute the parts among the group.

Since food, clothing, houses, and tools are essential, their acquisition and use influence other phenomena, such as family life and the kind and size of community. The family was once the main economic institution until the development of trade and manufacture created factories and enlarged villages into cities. The changes in the various social institutions will be incompletely understood unless stock is taken of the economic institutions.

In modern times, economic activities are so numerous and extensive that, aside from self-sufficing farming, they cannot be controlled or aided by the family, which has been replaced as an economic institution by a variety of other organizations such as corporation-owned plants. Since the local community is too inadequate to exercise much control, there is an increasing amount of national legislation affecting industry. Industry outside the household, with little governmental control or help, has not worked particularly badly since great industrial progress has been made and the plane of living of the people has been raised. One reason for industry's success is the automatic way in which supply balances demand, with some imbalance, of course, as, for instance, in business depressions. The main problem concerning present-day economic institutions is how in all their variety and magnitude

they can be best integrated with the other parts of society — a condition well fulfilled among stationary primitive peoples. We are interested in how economic institutions can be controlled when they use ruthless power, how they may be made to evolve toward greater efficiency and production, and at the same time how they may be aided, particularly in times of disturbance.

The treatment of economic institutions in this chapter will be in terms of their relationship with various other social institutions. It is the social aspects of economic life, not discussed in textbooks on economics, that constitute the subject matter of this chapter.

ORIGINS AND DEVELOPMENT

In the Beginning

Food-gatherers and hunters. The anatomical analysis of man's foot and hand suggests that he once may have been a tree dweller, in which case his earliest economic activities consisted largely in searching for fruits, nuts, and green shoots. We find him first, as man, living in the food-gathering cultures. Here the general picture is one where the procuring of roots, fruits, berries, greens, grains, and seeds is supplemented by some hunting and trapping of land and water animals. The proportion of food from animals and plants varies, but in general the proportion of plant food is large. In some of these cultures, however, the reliance on meat is preponderant. Indeed, where animals are abundant, the technique of hunting becomes so highly developed that it may be desirable to separate the hunting cultures from the other food-gathering cultures which rely largely on plant food. The Hupa, for instance, lived mainly on acorns, and the Sioux — at one period — on buffalo.

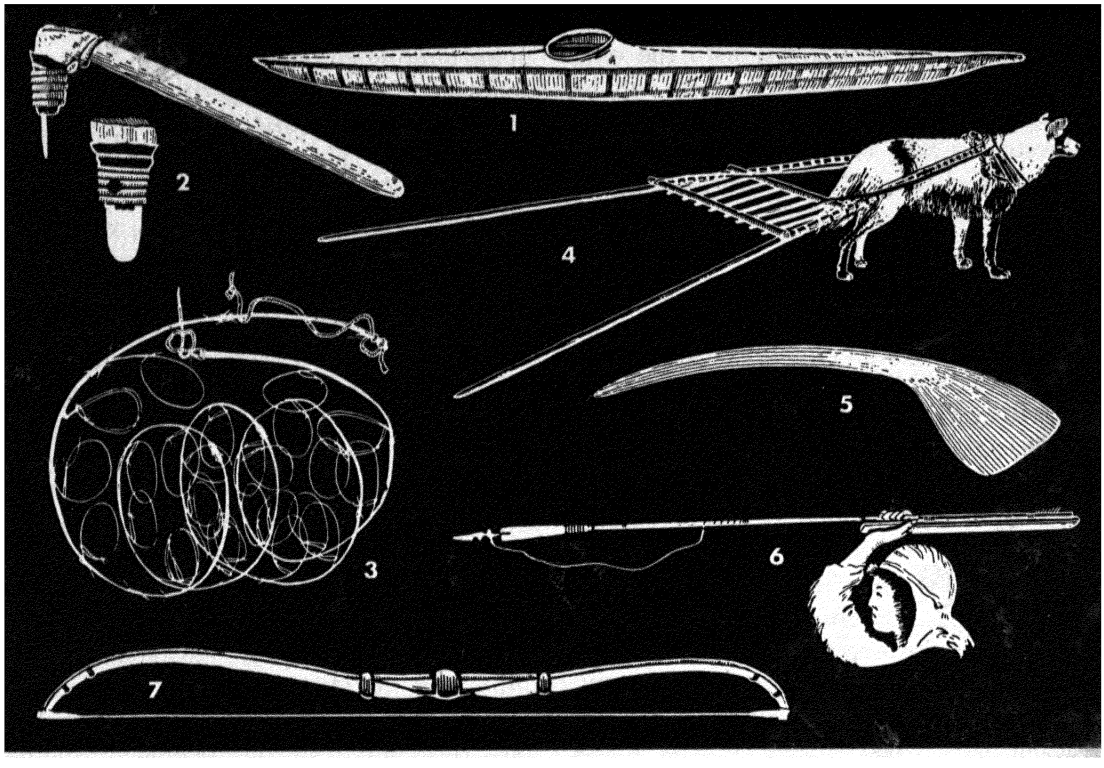
Sex division of labor. An early organization in the procuring of food and its preparation is the division of labor between men and women. Men, and not women, are generally the hunters where hunting is an important source of food. Women are more often the gatherers of roots, berries, nuts, and grains. Sometimes there are exceptions and variations from one people to another. The division of labor between the two sexes is shown in Table 30 for a large number of peoples of different cultures. This table indicates that there are not many places where men and women share the same jobs; the occupational cleavage is fairly sharp.

The various hunting cultures are by no

Table 30 · Sex Specialization in Occupations*

ACTIVITY	NUMBER OF SOCIETIES IN WHICH ACTIVITY IS PERFORMED BY:				
	Males Exclusively	Males Predominantly	Males or Females	Females Predominantly	Females Exclusively
Pursuit of sea mammals	34	1	0	0	0
Hunting	166	13	0	0	0
Trapping	128	13	4	1	2
Fishing	98	34	19	3	4
Gathering shellfish	9	4	8	7	25
Gathering fruits, berries, nuts	12	3	15	13	63
Preservation of meat and fish	8	2	10	14	74
Gathering herbs, roots, and seeds	8	1	11	7	74
Cooking	5	1	9	28	158

*George P. Murdock, "Comparative Data on Division of Labor by Sex," *Journal of Social Forces*, 15:551, May, 1937. The peoples included in the table are not all hunting peoples.



180 Some Capital Goods of the Hunting Cultures

(1) Kyak; (2) adze; (3) trap for catching water fowl; (4) dog travois; (5) throwing club*; (6) throwing stick and spear*; (7) bow. The throwing stick is equal to a prolongation of the arm; hence it adds more power to the spear hurled from it. The throwing club is a very common tool and reaches a fine development in the boomerang. The travois, used with a dog, was later made to fit the horse. Among the Eskimo, the dog also pulls the sled.

(* Redrawn from Franz Boas, *General Anthropology*, Boston, D. C. Heath and Company, 1938.)

means entirely alike. The culture of the Andaman Islanders is very rudimentary in material goods, while that of some hunters of the North American Indians was very high. But there are many points in common. For one thing, hunting and gathering alone do not yield an abundant food supply throughout the year for peoples with limited means of travel and little development of food storage. Hence it is not surprising to find a requirement of one square mile to support a person, or, among some hunting peoples, even ten or twenty square miles or more. The hunting peoples do not generally live, of course, in single families, but in small communities or bands, of a score of individuals or a score or more of families.

The family and the community are economic institutions. The family is an important institution in both the production and consumption of goods. The wife ordinarily prepares the food, which the men, or the men and women of the family, bring in. However, the family is not the only producing and consuming organization. Some hunting, for instance that for the buffalo or caribou, is undertaken by parties of men larger than the number of men in a single family. The walrus and other big game are best hunted by groups of men also. The hunting

parties may be away for weeks or months. The consuming organization is generally the family group, but even so on many occasions there are groups of eaters much larger than the family unit, especially at festivals and ceremonies. Accordingly it may be seen that the community as well as the family, at times, becomes the producing and consuming unit.

In many areas the food, either plant or animal, may in the course of years become scarce, in which case the band moves a short distance to where the food appears to be more plentiful. The nature of the hunting life is often such as to make for a mobile group. This fact makes it difficult, no doubt, to develop housing, pottery, or other arts to any high degree.

The origin of trade. The early primitive communities are self-sufficient economically, and hence do not depend upon trade. Moreover, the distance between settlements is often great and the means of transportation rudimentary. Those who have boats or who drive dogs hitched to sleds may travel considerable distances. But since in general the hunters do not have domesticated horses, the means of transportation do not favor much intertribal trade. Another obstacle to trade is the absence of a standard medium of exchange. Durable objects of an ornamental nature, such as jade or shells, seem to have a wide acceptance and occasionally assume the nature of money. Generally, however, trade is between neighboring tribes and the procedure is barter. The earliest trade results from differences in natural resources in particular areas, which occasion abundance or scarcity of desired commodities, such as fish, nuts, or skins. But, as has been suggested, trade plays a relatively small part in the total economy of the hunter.

Some hunting peoples do not seem to know how to trade. Early white traders sometimes found well-mannered primitive hunters who depreciated their goods and insisted they were not worth enough to trade. They professed surprise that anyone would want their material possessions. In other places there is the custom of silent trade. One group leaves on a designated spot the objects it has to offer. Later, upon return, they find that the objects have disappeared and other goods have been put in their place. Trading does not appear to be instinctive or even natural. It has to be invented or learned, and apparently it is a late social invention in the evolution of culture.

The exchange of gifts as trade. The giving of presents is a social substitute for domestic trade.[1] Thus, if a wedding occurs, gifts are brought, which some time later are reciprocated. The system is much like our Christmas giving, which effects a rudimentary exchange of goods. As with us, the people of the hunting cultures remember with great precision the value of the gift. If a task is to be done which calls for cooperative service, such as building a dwelling, and if one cooperator works vigorously and another lazily, this fact will be remembered with exactness for a long time and the reciprocation made with the proper vigor or laziness.

To the casual observer, who sees this voluntary cooperation, gift-giving, and hospitality, it all appears very generous and even idyllic. But the observer does not reckon with the memory and the degree of reciprocation expected in a gift of goods or services. There is not much chance of anyone's making a profit in such an exchange of aid, at least not for long, for the reputation of a slacker is quickly built up and a lazy person has many difficulties. For one thing he may have trouble in finding a woman who will marry him, or one who will remain married to him if he proves a laggard.

Hospitality as an economic service. We have seen that before the invention of

[1] Marcel Mauss, "Essai sur le don, forme archaïque de l'échange," *L'Année Sociologique* (N.S.) 1: 30–186, 1923–24.

money and credit, gifts rendered a function like that which money renders with us. In the absence of banks and before the inventions of rent and interest, these service functions were rendered by the practice of hospitality. Hospitality, which is sometimes mistaken for communism, is the rule everywhere in hunting communities. This system of extending hospitality works out reciprocally in the long run. As a matter of course, the traveler is provided with food and rest without payment. Indeed, no person in the community is allowed to starve if anyone else possesses food.

The practice of hospitality is at times quite extreme. It even permits the borrowing of a great variety of material objects that are not in use. The custom of lending for money, or of renting, had not been invented among hunters. The ever present custom of hospitality was extended to cover borrowing, which again is reciprocal. The objects used in the hunt, such as the hunting boat and the harpoon, are not allowed to be lent to others, for they must always be at hand. But other objects may be taken, sometimes even without the owner's knowledge. Moreover, if in use another person's property becomes damaged, it is not always obligatory for the user to make restitution.[2] To a modern observer such practices suggest common ownership. This generosity is especially notable in cases where everyone on a hunt gets a share of a big catch or kill whether he gives the death stroke or not. Also the common use of land for hunting is very widespread. A given area is seldom restricted to the use of a particular individual or family.

[2] Among the Bering Strait Eskimo, "if a man borrows from another and fails to return the article he is not held to account for it. This is done under the general feeling that if a person has enough property to enable him to lend some of it, he has more than he needs. The one who makes the loan under these circumstances does not even feel justified in asking for the return of the article, and waits for it to be given back voluntarily." E. W. Nelson, *Bulletin of American Ethnology,* 18, Part I, p. 294.

Early attitudes toward property. These habits of gift-giving, hospitality, free borrowing, and lending, and the common use of land have led to the idea that communism existed among the primitive hunters. Did communism exist among primitive peoples, or was there individualism and private ownership of property? The point is considered by many to be of value because it appears to throw some light on the nature of man. In the private capitalism of today the pursuit of money and private possessions seem to be a part of our nature. Many individuals feel that a common sharing of goods would be unnatural. There are others who argue that primitive hunters were communists throughout the hundreds of thousands of years that man was in this stage of culture, and that communism mirrors man's nature. Private property, it is claimed, was a late development, and man's original nature has been twisted abnormally into selfish patterns by the rise of the institution of property.

This analysis regarding the true nature of the human race is subject, of course, to the critiques developed in the fourth section of this book. The idea was advanced there that the original nature of man is highly flexible, though not unlimitedly so, and that the particular culture pattern into which he is born may make him practice either generosity or acquisitiveness. The generosity or selfishness which he displays, be it for ever so long a time, mirrors merely the culture in which he happens to be living. As we shall see, culture is only partly the creation of original nature, and man is always only partly well adjusted to his culture. Whether man was communistic or individualistic during his life as a primitive hunter is not as significant, then, as it would be if culture were rather more directly a biological creation.

With reference, however, to the economic life of primitive hunters, it is apparent from the preceding paragraphs that there are both common usage and private ownership.

Clothing, ornaments, weapons, tools, utensils, lamps, and usually houses were individually owned, much as with us. Primitive hunting lands, on the contrary, would be called by a modern the property of the clan or band. Indeed the idea of individual ownership of property among many primitive peoples was not applied to land any more than we apply it to air. In general what we call public property consisted of the basic means of production. Certain essentials of life, such as land and the food supply, were generally identified with the group, whether it was the family, the clan, or the whole tribe, rather than with the individual.

The communal practices appear to have been the outgrowth of the conditions of life. The mobility of animals hunted and the distance to be covered would seem to make individual ownership of hunting lands difficult. The absence of money was naturally accompanied by a system of gifts. The relative scarcity of material inventions and of property seems to mean that property was much more subdued as an element in the social life of primitive peoples than it is with us, where it is plentiful. The prestige of wealth and property is very great with us. Among primitive peoples the prestige of prowess, or reputation in lines other than wealth, was great, as evidenced by the fact that often among primitive hunters slander or malicious gossip was severely condemned and might lead to serious punishment or even to death.

Economic incentives: property vs. reputation. The modern economic system with all its elaborate structure moves, it is said, because of man's desire to make money. The socialists call this driving force which puts all the capitalistic machinery in motion the profit motive. If there were not this lure for private gain, why would a man work long and hard? It would be better to lie under a tree and invite one's soul after the manner of Omar Khayyám. Such is the capitalistic view of economic incentives. It is argued that socialism will not work because it removes the great incentive to effort, namely, the lure of gain. On this interesting point, the primitive economic system should throw some light, since it was a system where there was very little private property, where wealth was poorly developed, and where much of what we call property, like land, was communal.

It should first be stated that the lure of gain is not nonexistent in primitive economies. The food-gatherer who works the hardest has the most food to eat and can give the biggest feast. But observation shows that the best hunter not only has the most food, he also has the biggest reputation. The lazy hunter receives the scorn of the community. If the incentive for property is slight, certainly the incentive of reputation is very great among peoples with little property. It spurs men to action.

The potlatch competition of the American Indians of the Northwest Coast, to which we have previously referred, illustrates this type of incentive. The reader will recall that these Indians meet in a great celebration while certain goods are distributed by the wealthy — usually blankets, which are highly prized. The person who takes them is expected to return them with interest, that is, more blankets. The individual who returns the blankets with the most additional blankets receives the greatest honor. One borrows them at the highest rate of interest possible, instead of at the lowest rate as with us. Glory goes with the payment of high interest. As Barnett [3] puts it, "Virtue rests in pub-

[3] H. G. Barnett, "The Nature of the Potlach," *American Anthropologist* (N.S.), 40: 353, July-September 1938. This summary points to a more refined and more nearly definitive concept of the potlatch than is given above. In certain respects, the psychology of the potlatch is not unlike the psychology of "conspicuous consumption" by certain people of wealth in our own day. (Cf. Thorstein Veblen, *Theory of the Leisure Class* [New ed.; New York: The Viking Press, 1945].) Status goes

licly disposing of wealth, not in its mere acquisition and accumulation. Accumulation in any quantity by borrowing or otherwise is, in fact, unthinkable unless it be for the purpose of immediate redistribution." Thus the goals men work for are determined by their culture.

Curious, indeed, from our point of view are the motives underlying the economic activity of men in different cultures. Linton tells how he once bargained with a native merchant at Tananarive for a piece of raffia cloth, finally securing it at a price about a fourth greater than any native would have paid. Linton [4] then offered to take the merchant's entire stock at the same price, but the offer was flatly refused. If he sold out, the merchant explained, he would have the rest of the day on his hands with nothing to do. Dwight Morrow, one-time American Ambassador to Mexico, relates that he purchased for two dollars a handmade chair from a Mexican peon. He then asked how much the Indian would charge for ten such chairs, and was told twenty-five dollars. When Morrow expressed surprise at this increase in wholesale rates, the Indian explained that he would find making nine more chairs exactly alike exceedingly exacting and annoyingly monotonous.

Primitive economics is social economics. These examples illustrate a general aspect of economic processes in primitive society: they are woven into close relations with other institutions. The potlatch is related to celebration and festival. The exchange of goods is facilitated by gifts at weddings or ceremonies. The custom of hospitality prevents the complete control of personal property. Also, hunting is sometimes closely tied in with religion and magic. Some animals become the totem for a clan and are not allowed to be killed. Again, as was seen, the beginning of trade among hunters is often governed by what we would call good manners. There is thus a close connection between economics and group standards. The economic processes concerning exchange, trade, production, and distribution are very much in accord with the values of the community. Primitive economic life is closely interrelated with family, religion, and community folkways and mores.[5]

From Wild Food to Domestication

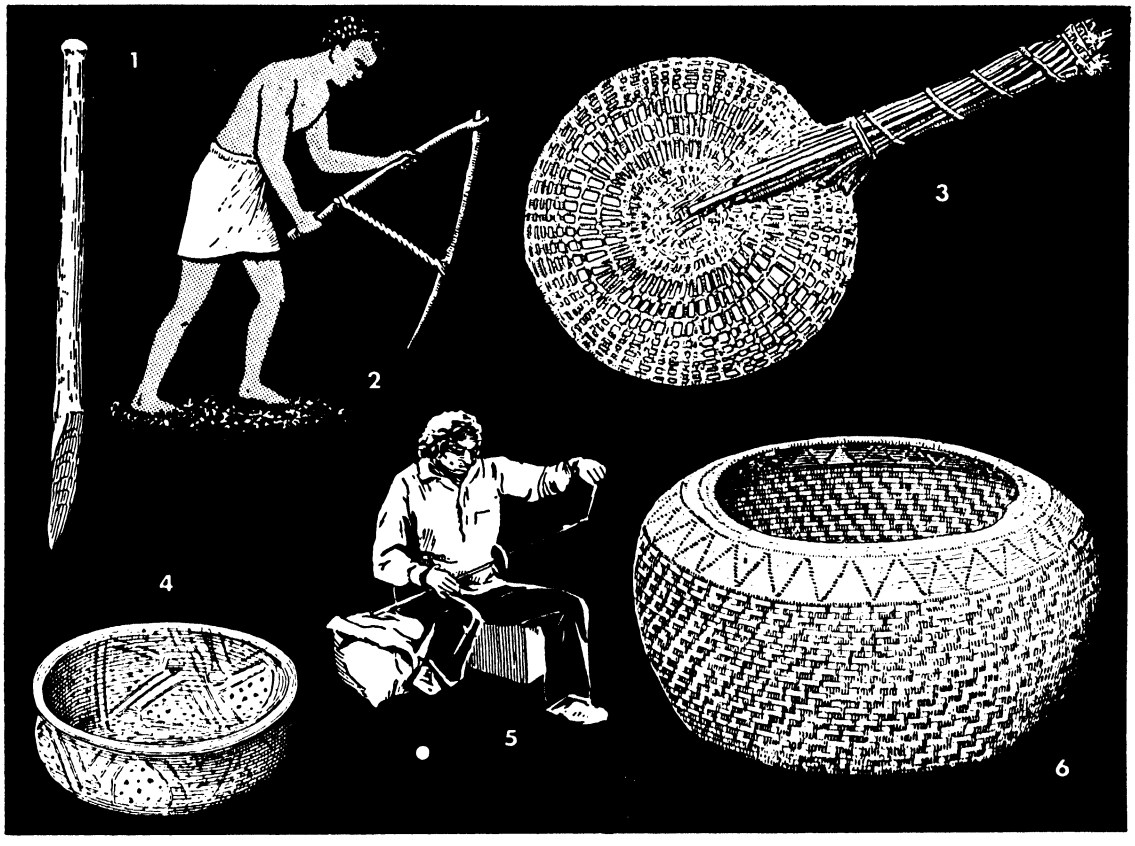
Economic life is not only related to community standards; it is also decidedly a function of tools and inventions. Two great discoveries eventually were made which gradually replaced the hunting life with new superior economic forms and greatly speeded the development of some of the economic processes familiar to us. These discoveries were first, the domestication of animals, particularly the big animals such as cattle; and second, agriculture. Most of the hunting peoples had already domesticated the dog, which aided in the hunt and helped somewhat in transportation, as with the sled among the Eskimo or the travois among the American Indians. With planting and domestication came other discoveries and mechanical inventions. The course of economic organization is closely dependent upon the new inventions in material culture.

Life in the times of early agriculture. Agriculture tended to emphasize the private ownership of land, though there are some agricultural peoples whose land is owned by the clan as in the hunting cultures, and is assigned in plots for use to different families. The crops, however, are the property of the individuals working them. In some cases planting or harvesting may be done coopera-

with the possession of wealth, and is enhanced by the conspicuous display of wealth.

[4] Ralph Linton, *The Study of Man* (New York: Appleton-Century-Crofts, Inc., 1936), p. 144.

[5] L. T. Hobhouse *et al.*, *Material Culture and the Social Institutions of the Simpler Peoples* (London: Chapman and Hall Ltd., 1930).



181 Some Capital Goods of the Hoe Cultures

(1) Digging stick*; (2) wooden hoe; (3) seed-beater; (4) pottery; (5) spinning stick*; (6) basket. The digging stick, the first agricultural instrument, was used for many thousands of years. Some of the American Indians who did not have pottery cooked their mush in a watertight basket containing hot stones. Roots as well as seeds were often set out; and many seeds could be stored, thus causing greater security and less loss of life.

(* Redrawn from Robert H. Lowie, *An Introduction to Cultural Anthropology*, 1940, with the permission of the author and publishers, Farrar & Rinehart, Inc., New York.)

tively, so that the food belongs to a number of families collectively.

Farming without a plow and where the main implement is a digging stick is called hoe culture. Hoe culture, like hunting, is not as simple as it may seem, but becomes quite an art. For instance, when the Hopi of the southwestern American desert plant corn, the days of planting are announced by the town crier. The land is then allotted. The planters choose the sandiest spots to plant in, because these are the lowest and likely to catch the most water. The holes are usually 12 or 15 feet apart so that the roots may not draw water from another plant. Ten or twelve grains are planted in a hole; otherwise there would not be enough pollen to fertilize. Flat stones are set up on the windward side of the young sprigs of corn, to keep the drifting sands from cutting it down or covering it up. The tillers work around the young corn with a stick to catch the cutworms that feed on the corn. The tilling aerates the roots, a good dry farming practice. So expert are the Hopi methods that modern students of scientific agriculture

have not been able to offer any improvements, if the same tools and seed are used. Even so, the Hopi must keep one year's supply of corn ahead as insurance against drought, for despite all these careful methods of agriculture some crops are lost. The average annual rainfall in the area is so low that a slight decrease in precipitation may be enough to destroy a year's planting. Agriculture assures a more nearly certain food supply than does hunting of animals, and less is left to chance; but there is hazard in agriculture, even in twentieth century farming. Crops may still be lost.

With the stable life of agriculture are associated other inventions. Pottery-making is partially correlated with agriculture and seldom found among hunters. The weaving of hair or wool or cotton is more often found among agricultural groups, for whom it substitutes somewhat for the hunters' use of skins as clothing. With agriculture, housing is more highly developed since habitation is more settled and invention has made some progress. There are, of course, exceptions, as is usually the case with any cultural phenomenon because of the numerous causal factors involved.

With cloth, pottery, baskets, and crops, property begins to accumulate and to become of considerable significance. Moreover, the advanced skills required in these pursuits lead to further specialization. Out of one hundred individuals, some will do a job better than others. These are the ones likely to specialize. The foundations of exchange are thus laid. Under agriculture there is greater chance of trade.

Social effects of the domestication of animals. With the domestication of cattle still greater stability of the food supply is gained. However, not all people who have domesticated cattle use milk or its products, butter and cheese. Such processes must be first discovered and adopted. Even so, domestication of plants and animals means the continued presence of food, in contrast both to the uncertain supply in the wild state and to the capricious situation in the case of crops. Also, if the herds increase there is more wealth for exchange and trade.

Domestication in some cases began when herds of animals were followed closely, as the Lapps do today with the caribou. In these early stages the animals remain half wild. The domestication of cattle is clearly a man's work and frequently the male assumes a more dominant position among pastoral peoples than he does in the hoe cultures.

In so far as pastoral peoples wander with their herds, their life is more like that of hunters than of settled agriculturalists. They are not so likely to carry pottery with them, for instance. Shelters that can be quickly constructed are most suitable. The wandering type of life of some herders seems to fit them for marauding expeditions, the stealing of cattle, or raids on agricultural granaries. Such is the case especially where the horse has been domesticated. The horse is a great aid in war, comparable to the gun or the airplane in later times. The horse is swift and can be ridden; sudden attacks and departures are readily possible, and one may fight from horseback. Cavalry is a great advantage in a fight against people who do not possess horses.

Property becomes more plentiful and varied. With the development of the domestication and breeding of animals, pastoral life and farming eventually became fused in many lands so that farmers possessed some sheep, cattle, and horses. Such was particularly the case where the plow pulled by an animal had been invented. At this stage of plow culture, property had become quite highly developed. There was individual ownership of farm land, equipment, and products. By planting in rows dug by a plow and by using the power of domesticated animals, a much larger and

more certain food supply was possible, and the population became still more dense. In favorable locations the agricultural produce was sufficiently plentiful to exchange. Where the boat and horse were practicable, travel occurred over great distances and the means for carrying on trade were thus established. Meanwhile progress was made in many of the arts. The potter's wheel made better pottery, and glazing was developed. Spinning, which was done earlier by twirling a stick across the knee, was improved with the spinning wheel. There were also improvements in weaving.

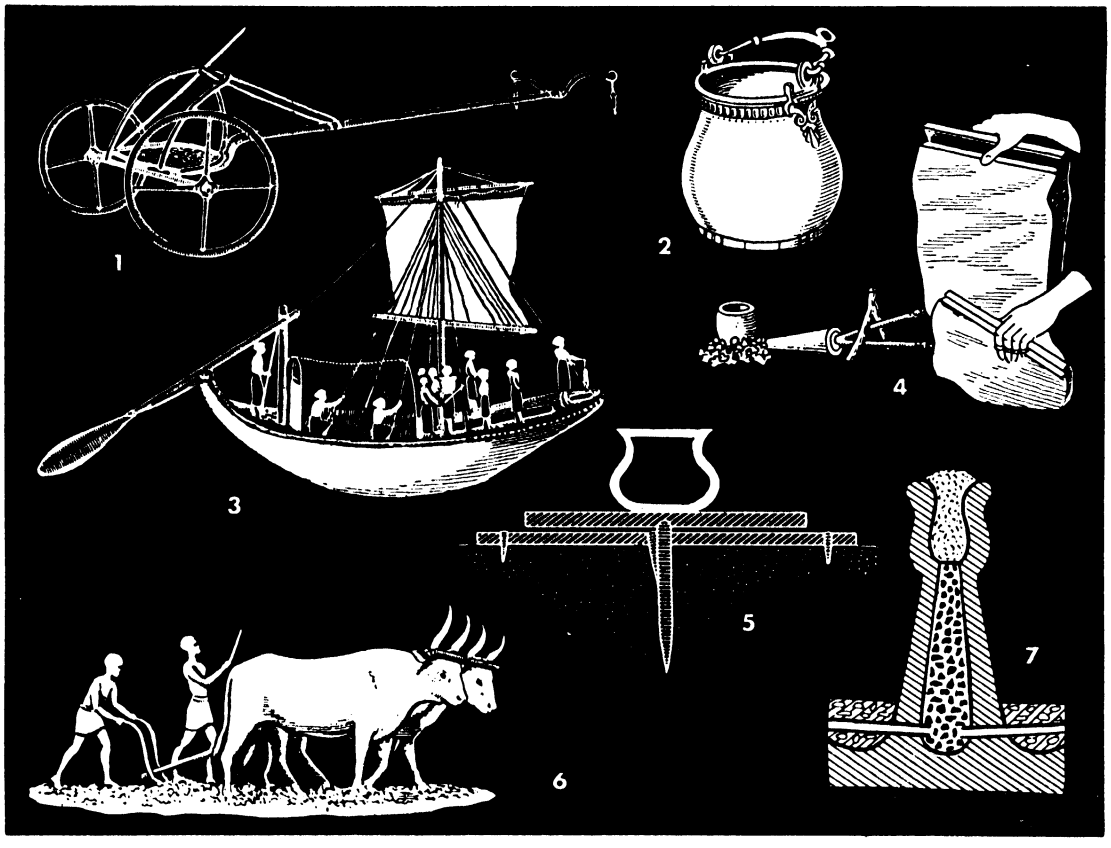
While the plow culture brought more wealth and a higher development of the practical arts, it should be noted that the handicrafts had developed into a considerable industry by the time the plow culture was reached. The extent and variety of hand manufacture of useful objects is generally underestimated by those unfamiliar with the simpler material cultures. Much detail is lost in long range perspective. As has been shown, the earliest handicraft products were found in the hunting stages; the devices of hunting and trapping were large in number and of many different types. Even in the ice ages the stone tools for cutting, scraping, and spearing existed in a score of varieties. But by the time the digging stick was superseded by the plow, the evolution of material objects as consumers' and producers' goods had resulted in a still greater variety. These products centered upon planting, reaping, winnowing, grinding, the care of animals, dairying, cooking, serving food, housekeeping, decoration, furniture-making, leather production, sewing, making of fire and light, spinning, weaving, dyeing and basket-making.

The economic significance of the development of the handicrafts is varied. In the first place, it meant a growth of property. In the competition between man's quest for possessions and his desire for intangible values such as reputation or affection, the former was gaining ground. Second, the greater the variety and number of such objects of hand manufacture, the greater the requirement of labor, and hence there was an impetus to an extension of the division of labor beyond the principles of sex and age.

Social Institutions That Came with the Plow and Cattle

Land and property. When the plow and domesticated animals were added to the hoe in agriculture, land became very important. The yield of land was increased by improvement in methods, as the decades and centuries passed. Individual ownership became the rule, though some pasture and woodland may have been held in common. By individual ownership is meant individual family ownership; and the family, including kin, was sometimes a very large one. Since land was the basis of wealth, and men desire wealth, large land holdings resulted by purchase, by marriage, or by force, where enough labor could be had to do the work. This labor was in some places kin, in others slaves or serfs, and in still others sharecroppers. There thus arose social classes, peasantry and landed aristocracy. The large landholders fought among themselves. Wealthy families became very powerful and assumed governmental functions, including the judicial and the military. They sometimes sponsored art, architecture, and religious undertakings. Gradually and sometimes by revolution, family control was wrested away from a single family; and states were born. And villages, sometimes owned or dominated by rich landlords, worked their way to freedom and grew into independent towns and cities.

Feudal organization. Before the emergence of our modern order, the necessity for protection against marauding groups and rivals led in Europe and elsewhere to



182 Some Capital Goods of the Plow Cultures

(1) Wheel; (2) bronze vessel; (3) sailboat; (4) bellows*; (5) potter's wheel; (6) plow; (7) smelting furnace.* The bellows were early instruments used in connection with metal work. The use of the furnace in iron-making was a late development, not found in all the plow cultures.

(* Redrawn from Robert H. Lowie, *An Introduction to Cultural Anthropology*, 1940, with the permission of the author and publishers, Farrar & Rinehart, Inc., New York.)

the feudal type of organization, especially where a central government did not exist or was breaking up. Owners of property and large holders of land found they could exact payments of money or goods from weaker farmers. With this money soldiers could be maintained. A big farmer, called a lord, with little farmers grouped around him, could do the same. These lords lived in large houses called manors or castles, near villages or farms. They secured control over surrounding neighbors, exacting material tribute and service and giving them protection from robbers, pirates, and raiders in general. There was thus built up a type of economic organization much larger than the family but still centered upon the family. It led to greater division of labor and to an increase in the variety of goods, because of the potentialities which exist when wealth is accumulated in the hands of a few. The manor and feudal systems were very widespread, being found even among many preliterate peoples, sometimes in incipient forms and sometimes well developed.

In feudalism, government was closely tied to the economic system. The most powerful family that extended control over smaller

and weaker families and that controlled — often by brute force — a large amount of land, exercised the sort of control over the smaller farmers, serfs, and slaves that the head of the family had exercised over the family and labor on the family farm. The lord was a head family man and an autocratic ruler.

As feudal states grew and became integrated into larger national states, out of the nobility there evolved the autocratic monarch, who, of course, endeavored to control and derive unusual benefits from economic production, then largely agricultural.

The growth of the division of labor. Specialization was furthered by the discoveries of the use of copper, tin, gold, bronze, and iron. Such metals were very valuable as tools, weapons, and ornaments, and were put to uses formerly served by clay, wood, stone, grass, and beads. The distribution in nature of metals was less widespread than the substances they displaced, and on this account it was not easy for each household or each male in a household to become adept in the working of metals. Thus specialists such as the tinsmith arose. When the water wheel replaced the mortar and pestle, the miller appeared. And with the use of the wheel, invented in only one place in the world, there came the wheelwright. The development of specialists outside each family meant that there had to be a further exchange of goods. The specialists' goods were sometimes marketed by peddlers who went from house to house or village to village with their wares if there was enough security from robbers. Several traveling together gave greater security. Towns had special market days, when goods were spread out on the ground or in booths.

The exchange of goods over distances means transportation as well as trade. The boat, possessed by all peoples living near water, was a great agency for transportation even after the domestication of the horse. A horse can be ridden over plains, but it cannot be driven well through the woods without roads. Road-making is a fairly late development of man. Roads that would carry a wagon were, until quite recently, very poor. All during the Middle Ages the mileage covered by a loaded wagon over the rough roads was around a dozen or a score a day. The sled with reindeer or dogs to pull it over the ice was much faster than the horse and wagon. But the boat made possible the most extensive travel. It is known that in the eleventh century A.D., Icelanders had found their way to America and Istanbul.

The origin of the commercial and industrial city. With specialization in the handicrafts and improvements in transportation, the volume of trade increased. One evidence of this was the city, the rise of which is discussed in the chapter on communities. The percentage of people living in cities was small as compared with the numbers living on farms and in villages.

Within these early cities, located on water routes, there developed certain places for trade. The goods were assembled there on certain days to be inspected, bought, and sold. Such an impromptu market place was the origin of the store. Although trade was predominantly by barter, there were some goods in frequent demand which were exchanged most often. When such goods were light and durable, as was the case with gold and silver ornaments, money developed. The volume of trade coincident with a city's life was a stimulant for the use of money. Special stores dealing in money alone, that is, banks, did not flourish until modern times, though there were pawnbrokers in the Middle Ages and money-changers in Biblical times.

The economic life of cities soon became linked with the institutions of war. Cities on or near the coast were able with their wealth, power, and population to conquer

territories near and far with the aid of their ships. The cities became city states, and some expanded into empires, as, for instance, Rome.

THE MODERN ECONOMIC ORDER

Economic organization in modern times is signalized by factories, banks, fast transportation, corporations, cities, and labor unions — all not found in preliterate cultures and developed rather immaturely in the agricultural era. These varied organizations rest upon specialization, division of labor, and trade. Back of these activities lie the use of money and the substitution of mechanical power for muscle power. The exclusive use of money instead of barter ushered in capitalism, and the application of steam power to the tools of production brought the Industrial Revolution. The two came along together and accomplished wonders in our social life.

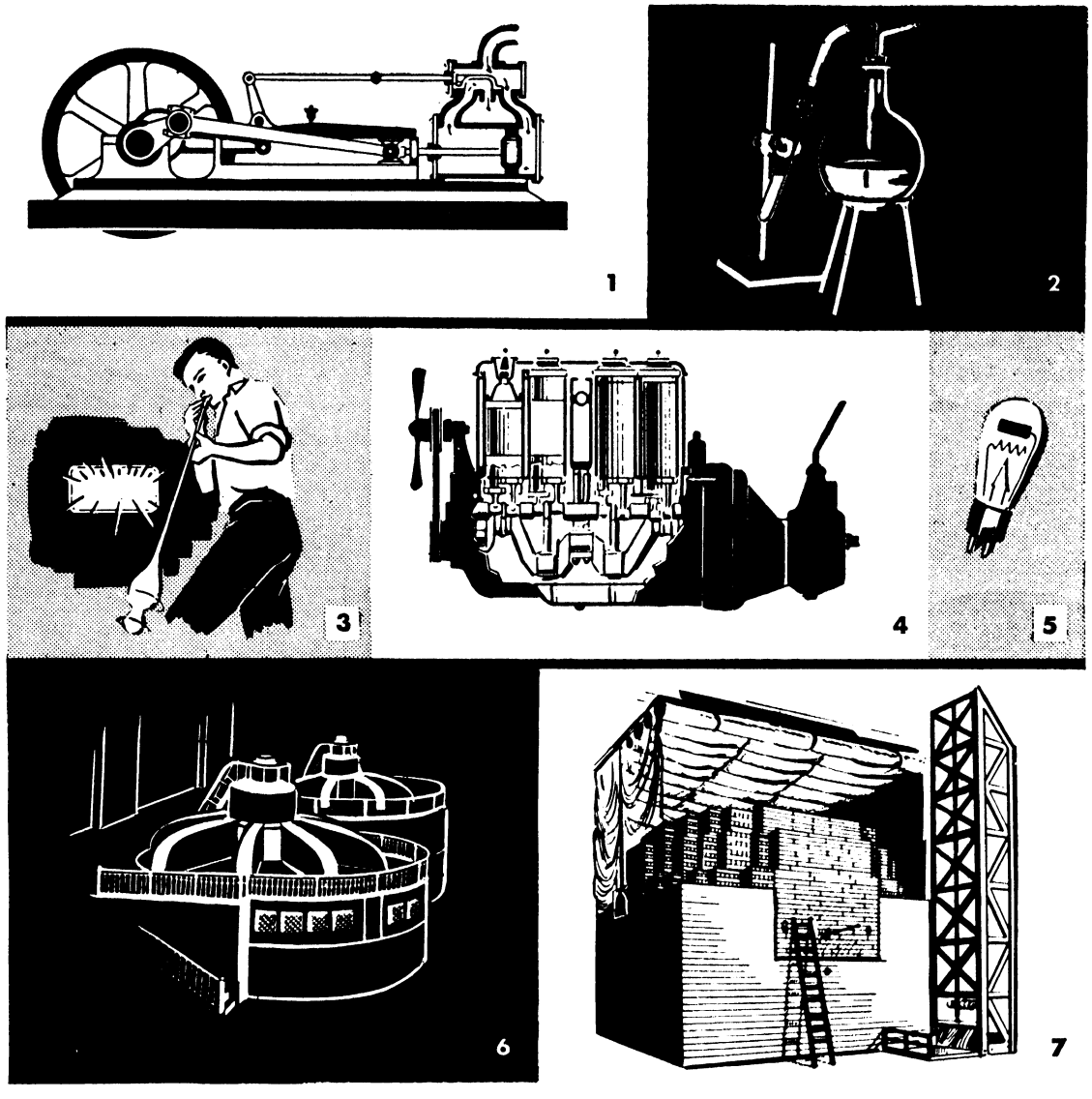
Capitalism is the designation for the system that makes use of capital, usually expressed in terms of money but really consisting of capital goods, namely, the instruments of production. The capital goods of a state may be owned by individuals or by the government. In the former case the economic system is spoken of as *private capitalism* or simply *capitalism.* It is the system under which most of the readers of this book live. When the capital goods are owned by the government we call it *socialism,* a system under which many millions of people in Asia and Europe live.

Capitalism. To understand capitalism we must designate its essence, which is the drive to sell for more than costs, the difference going to the private sellers. When exchange is by barter, instead of by the use of money, there is no way to measure the gain in a trade. The idea of profit does not exist. But today under the system of private capitalism, if business men did not sell for more than costs they would either go bankrupt or get no money reward for their work and risk.

The development of the notion of profit and interest was not easy. For the ideology of the Christian church of the Middle Ages was one of service and production for need, in opposition to usury, the charge of a monetary return for a loan, as Max Weber and Richard Tawney [6] have reminded us. They also argue that the ethics of the Protestants of Northern Europe were based upon such conceptions as thrift, individualism, the virtues of hard work, and proper rewards for personal industry. The Protestants denied that the Scriptures were in opposition to an interest rate. Thus the ideology of the Protestants was less hostile to capitalism than was that of the Catholics; and the institution of religion was related to the adoption of the new economic system. It should also be observed that coal and iron, a fundamental part of the structure of modern capitalism, are found more extensively in Protestant Northern Europe than in Catholic Southern Europe. This moral approach of the Medieval church to capitalism is found in arguments of socialists who would have the government take over the production, and produce according to needs or for social objectives; if sales are more than costs, the difference would accrue to the government, which under socialism is supposed to belong to the people.

The Industrial Revolution. The second outstanding characteristic of modern economic life is the application of mechanical power to production, a development which has paralleled the rise of capitalism. Small tools worked by muscle grew into big or complex tools run by steam and by elec-

[6] Max Weber, *The Protestant Ethic and the Spirit of Capitalism,* tr. by Talcott Parsons (New York: Charles Scribner's Sons, 1950); Richard Tawney, *Religion and the Rise of Capitalism* (New York: Harcourt, Brace & Co., Inc., 1952).



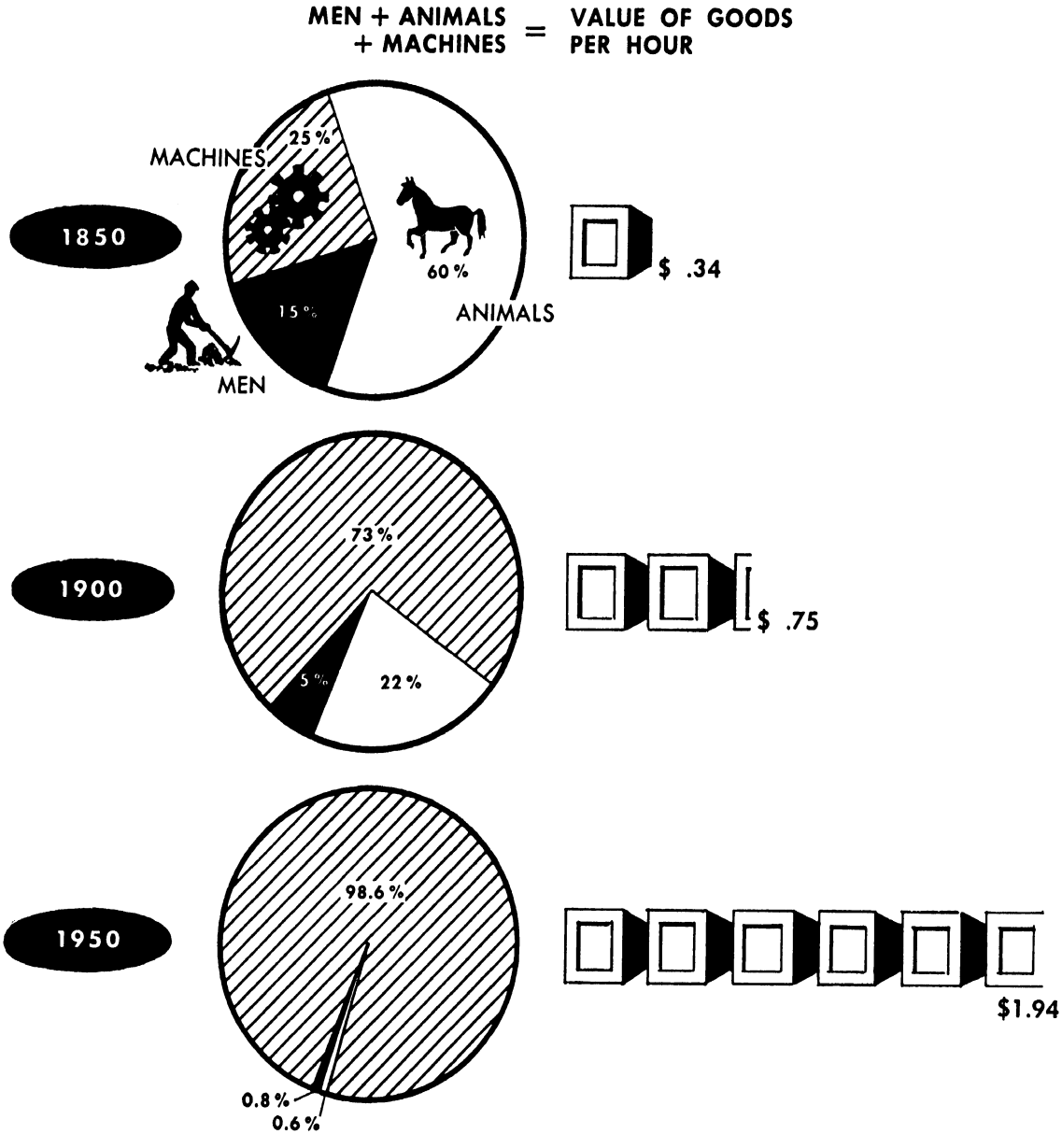
183 **Some Capital Goods of Modern Culture**

(1) Design of steam engine; (2) chemical retort; (3) glass blower; (4) cross-section of gas engine; (5) electron tube; (6) dynamo; (7) atomic reactor.

tricity, derived from coal, oil, falling water, and atomic fission.

The increasing use of mechanical power in the United States since 1850 is seen in Figure 184. In 1850 of all the energy used, only 25 per cent was from mechanical sources, whereas in 1950, the figure had risen to 98.6 per cent.

The progressive application of mechanical power to the production of material goods, exclusive of agriculture, and to transportation, led to such astounding changes that they have been called a revolution — the Industrial Revolution. In the twentieth century power from electricity, and molecular energy from chemicals have been added to



184 Machine Power

In 1850 men and animals supplied most of the energy for our work. In 1950, with machine power supplying nearly all of the energy we used, we turned out almost six times as much work per man-hour as a century ago. Future progress lies in raising our output per man-hour through increasing use of machine power and more efficient machines and organization of production. Value of goods shown above is in dollars of 1950. (Data from J. Frederick Dewhurst and Associates, *America's Needs and Resources,* New York, The Twentieth Century Fund, 1955.)

the Industrial Revolution of the nineteenth century.

Mechanical power actually brought two revolutions. One was the extensive and rapid change in the making of material goods and services, and was evidenced in the flowering of many economic institutions. The other was the revolution in the many social institutions that were closely linked to the economic activities.

The economic revolution. In the economic revolution, factories replaced the households as centers of production, except on farms. In factories the work was divided up into little pieces, each worker doing a single piece, as, for instance, in a clothing factory where one worker may only mark the cloth for a slit to be cut for a pocket. In producing a suit, there are scores of such pieces of work, each done by a different worker; whereas formerly one tailor did all these scores of tasks wholly by himself. In still earlier times the tailor was the basket-maker, potter, and cook — a Jack of all trades. Machines also do work without human workers; thus music is now supplied by machines. The process still goes on. Airplanes can be flown without a pilot's being in the plane. Some machines can do work much better than can humans. The electronic calculator for instance can multiply 386493267854 by 976722431876 in one fiftieth of a second. The machines that watch and control other machines usher in the age of automation.

Machines duplicate easily and rapidly. The result is that they turn out their products in great quantities. Mass production raises the plane of living by making available at cheap prices consumer goods that cover the land like the dew. Thus pins and cloth and lamps are much more plentiful and cheap than if produced by hand. Even such expensive goods as automobiles are mass-produced.

With mechanical power came large plants, and particularly large corporations owning many plants. Sometimes these corporations own all the plants in a particular industry, thus becoming monopolies. Production processes become highly interrelated, which is not the case with self-sufficient farming or primitive hunting. The average automobile has about 5,000 parts, made up of about 15,000 separate items of many different materials. Even a telephone receiver is built from 433 parts. So the different parts of modern industry become highly intertwined.

Specialization became intensified by region and by locality. In the United States iron ore is produced around the Great Lakes; motion pictures in Hollywood; and automobiles in Detroit. For such specialization to occur, there must be a high development of transportation, now based on boats, railway trains, trucks, and cargo planes with the accompanying organizations of shippers, buyers, sellers, and insurance and storage companies.

These developments of mass production, specialization, exchange, division of labor, and interrelationships of industries are accompanied by different systems, notably socialism and private capitalism.

Finally, with the Industrial Revolution there was a proliferation of economic organizations such as banks, stock markets, brokerage houses, insurance companies, industrial corporations, advertising companies, trade associations, chambers of commerce, merchants' associations, and lobbyists.

Social relations in industry. In the household economy, when the family was the prevailing organization, the labor force commonly consisted of members of the family and kin. When it was made up of slaves, serfs, or peasants, the numbers were small on an estate, and the head of the family knew them as persons and by name. Face-to-face contact was a common occurrence.

With the coming of the Industrial Revolu-

tion, factories or company-owned industries began to employ thousands of workers whom the owner or manager did not know. These workers were engaged in repetitive monotonous tasks and were so mechanically viewed that they began to be called factory "hands." A factory was seen as a mechanistic arrangement and not as a society of human beings. From the beginning of the Industrial Revolution, social workers, legislators, religious leaders, and some socially minded employers protested against this lack of the human touch in employer–employee relations. Labor unions argued that labor was not "a commodity" like pig iron and insisted upon the dignity of man. Laws were passed to safeguard the life and health of workers, to prevent employment of children and to provide a measure of security in case of accidents, unemployment, sickness, and old age.

During the World Wars when the supply of labor was short, when immigration had stopped, and when production had to be continuous, sociologists and other social scientists were drawn into industry to improve the relations between employees and management, with the goals of preventing work stoppages, reducing labor turnover, and increasing efficiency.

Industrial sociology. Sociologists had developed a science of the interaction of individuals, as has been described in earlier chapters. They showed that a factory employee was not merely a factory "hand" but a social being sensitive to status and rank, who had ideas of what his role should be, which were often different from those of the management. Sociologists proved that consultation on work problems was often more efficient than dictatorial decisions. The sociometry of group positions reduced friction and intrigues and led to increased output and decreased labor turnover, as well as increasing the satisfaction of the workers. For instance, in one experiment work partners were reassigned on the basis of preferences. As a result, there was a 5-per-cent saving in total costs and a reduction in labor turnover.[7] Sociologists introduced the concept of the factory as a social system.

Analysis of the interaction of the members of this social system in their place of employment was not the sole contribution to the sociology of modern industrial life. Outside the plant, the lives of workers are lived in communities.[8] The factory is located in a town or city. The community situation also affects the life and production in workplaces. Ethnic and race relations are important for successful employment outside the factory as inside. Social mobility, status and role in the community are not without significance to modern industry.[9]

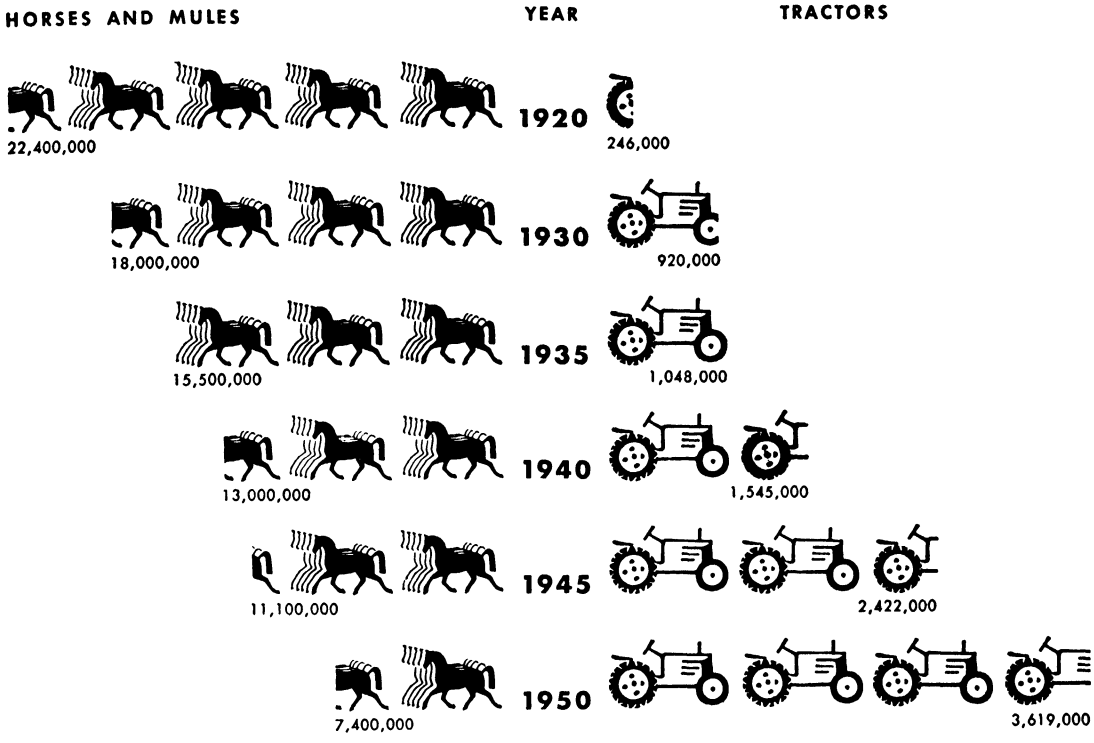
In this manner management of mass factory production in large units has learned the importance of social and community relations, a systematic knowledge of which was less urgently needed for production in the times of the household economy.

Agriculture. Steam power was applied to the spinning wheel and to the various handicraft tools but not to the plow or to the farming implements. In agriculture, manpower had been supplemented many centuries ago by the power of animals as pullers and carriers. Not until gasoline was used in the light internal-combustion engines in the first quarter of the twentieth century did farming begin to be mechanized.

[7] R. H. Van Zelst, "Sociometrically Selected Work Teams," in John B. Knox, *The Sociology of Industrial Relations* (New York: Random House, Inc., 1956).

[8] W. L. Warner and J. O. Low, *The Social System of the Modern Factory* (New Haven, Conn.: Yale University Press, 1947); W. F. Whyte (ed.), *Industry and Society* (New York: McGraw-Hill Book Company, Inc., 1946).

[9] John B. Knox, *op. cit.;* W. E. Moore, *Industrial Relations and the Social Order* (New York: The Macmillan Company, 1946); F. J. Roethlisberger and W. I. Dickson, *Management and the Worker* (Cambridge, Mass.: Harvard University Press, 1939).



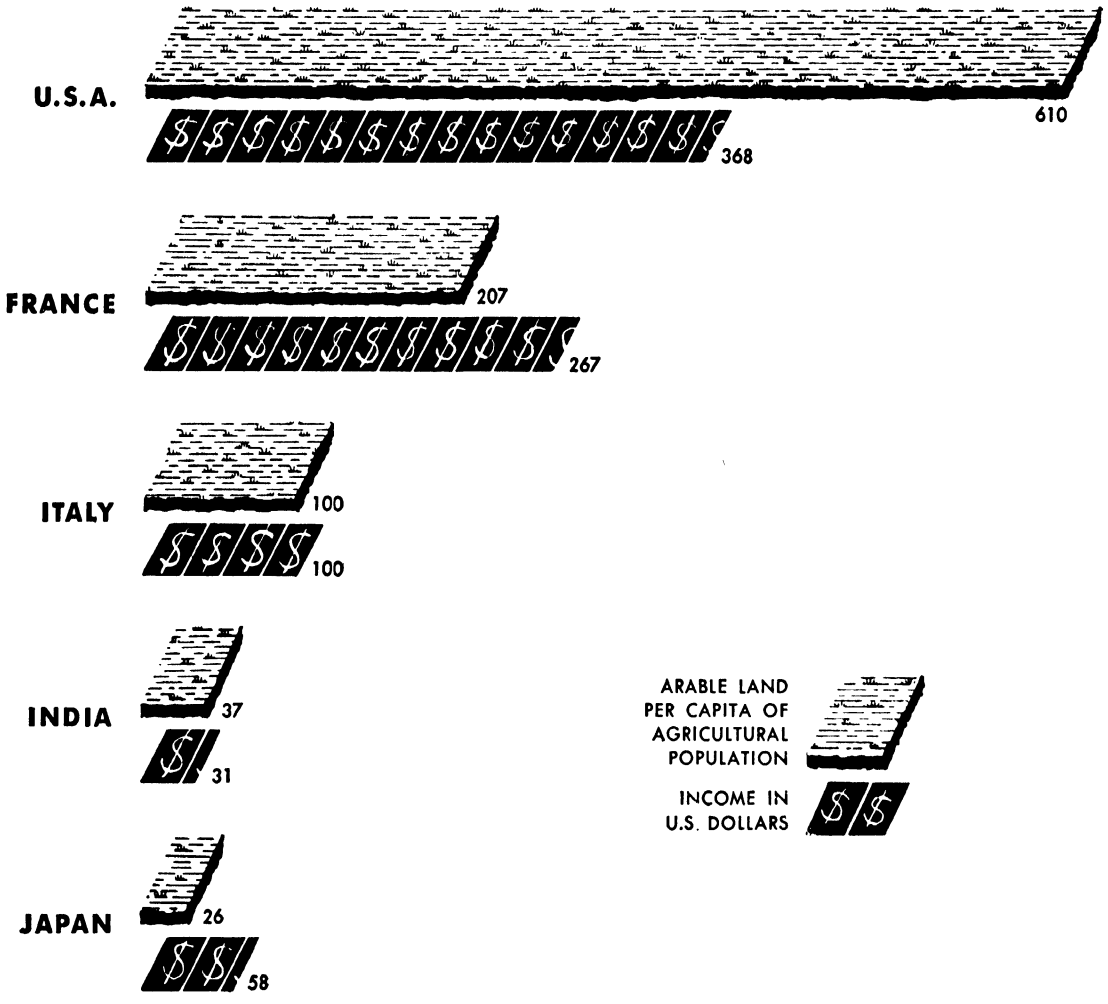
185 Horses and Mules Versus Tractors on U.S. Farms, 1920–1950

When tractors replace horses and mules, fewer workers are needed to do the same amount of work. If these unneeded workers do not find jobs elsewhere, there is unemployment or underemployment. Tractors also make it possible for a farm family to cultivate a larger farm. Unless the adjustment to the tractor is made rapidly, there will be too many farmers for their own economic welfare. (Data from U.S. Department of Agriculture, *The Agricultural Situation,* 1952.)

Tractors are rapidly replacing horses and mules on farms as shown for the United States in Figure 185. Machines now exist for most of the agricultural crops. Cotton, for instance, is now planted by the use of the tractor, cultivated by a mechanical chopper and weed-killers, dusted by an airplane, and harvested by a mechanical cotton-picker. Concurrently science has brought to farms better seeds, superior fertilizers, more thorough pest control, and finer breeds of animals. Science and technology have increased the production per man hour and production per acre.

This increased productivity means that fewer farmers are needed. They are moving in the United States to towns and villages. The farms become bigger and the income per farmer greater. In many parts of the world, though, technology and science are coming very slowly to the quite small farms.

Even before the gas engine, farming was affected indirectly by the steam engine in factories and in locomotives. For the factories made implements for the farms, and railroads transported farm products to the cities. But farm prices fluctuate more violently than do factory prices, for farmers cannot regulate production so easily. Frequently the prices of goods farmers sell drop more than the goods they buy. Much effort is made to make the agricultural production articulate better with the factory system, by government controls and by credit and



186 Size of Arable Farm and Income per Farm Person, in Selected Countries, 1946–1950

The level of living of the average farm family rests on the size of the farm. To raise the level, science can help; but it would be difficult to make a farm of 3 or 4 acres of cropland produce as much as one of 65 acres. The small farms of the Far East are a great hindrance to improving the living standard of the agricultural population, which is large and increasing and on land densely settled.

The drawings are based on index numbers, those for Italy being 100, and are based on acreages and income. The acreage is the arable land divided by the agricultural population, and the incomes are for years between 1946 and 1950. Income per person of the agricultural population expressed in U.S. dollars has some error for comparisons because the exchange value of a local currency is not the same as its purchasing power in the country. The computations are by the authors from data in W. S. and E. S. Woytinsky, *World Population and Production,* the Indian Census, and the U.S. Census.

marketing agencies, as is indicated in Figure 187. However, the success has not been as great as the farmers need.

The Accompanying Changes in Social Institutions

The revolution in industry did not occur in a vacuum. It produced another revolution in the related social institutions, as is shown in many different chapters of this book.

For instance, a revolution was produced in the family, which was formerly the chief economic institution of society. The homestead was the "factory" of the agricultural economy, which is sometimes called the household economy in comparison with the factory system of today.

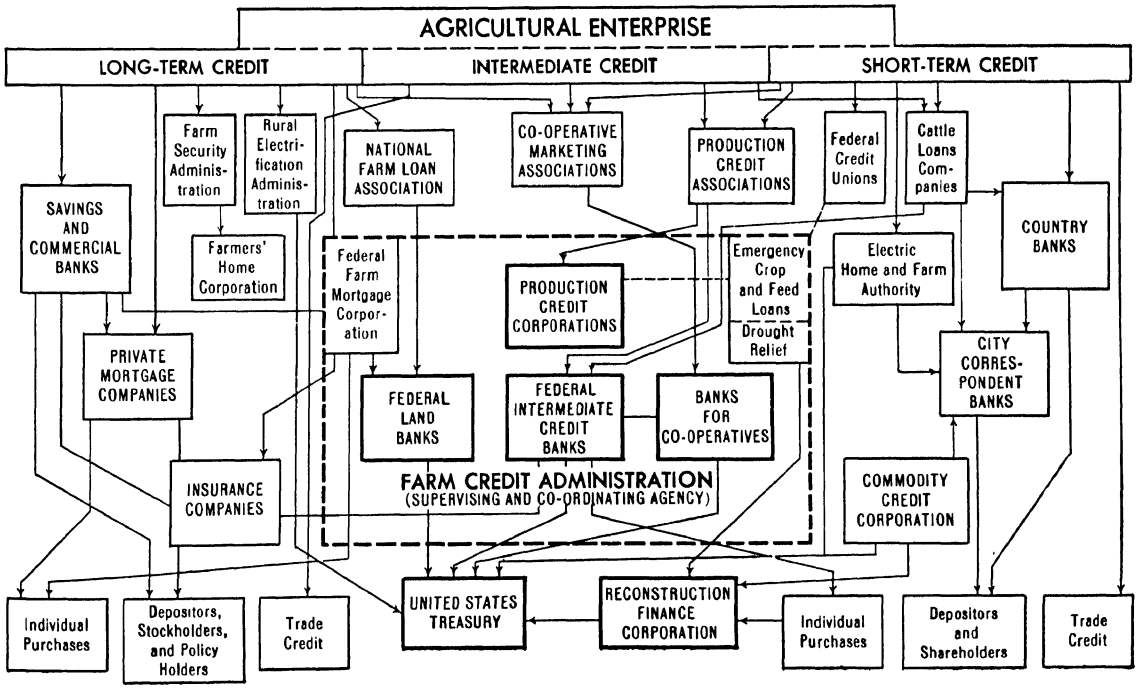
The Industrial Revolution brought cities. Formerly there had been a few large cities — Athens, Rome, Shanghai, London, Paris. But the urban population was only a small percentage of the total. In the United States in 1790, 97 per cent of the population lived in the open country or in places of 8,000 population or less. Even in China in 1940, only about 10 per cent of the population were non-farmers living in cities.[10] Cities not only became more numerous but the existing ones became larger. Rome had a population of 150,000 in 1800.[11] In 1950 it

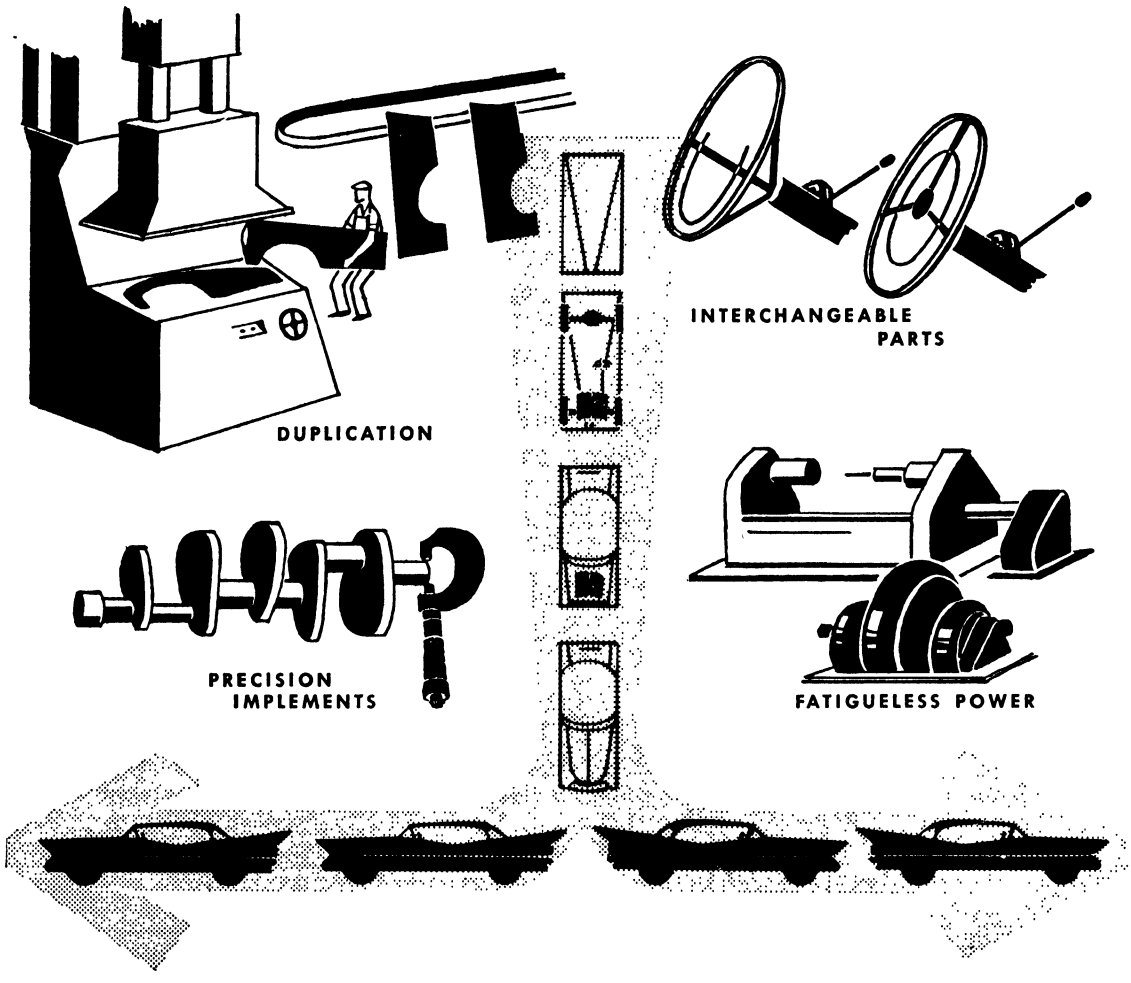
[10] Gerald F. Winfield, *China: The Land and the People* (New York: William Sloane Associates, Inc., 1948), p. 34.

[11] Warren Thompson, *Population Problems* (3d ed.; New York: McGraw-Hill Book Company, Inc., 1942), p. 312.

187 Institutions Utilized in Agricultural Borrowing

As agriculture becomes commercialized and mechanized, farmers develop credit institutions of their own. In the early stages of agricultural development, farmers had to be dependent on urban credit institutions. (Harold G. Moulton, *The Financial Organization of Society*, 3d ed., Chicago, The University of Chicago Press, 1930, p. 607.)





188 Mass Production

Abundance, the end product of the modern economic system, comes from mass production. Inventions would not result in marvelous products at low prices without the technique of mass production. The key to mass production is interchangeable parts (developed by Le Blanc in 1765 and by Eli Whitney in 1800), which depend upon precision instruments and methods of duplication. Fatigueless power and the speeding assembly line aid the process.

was ten times as large. With cities came radical changes in other institutions and ideologies, as for instance in government, in the church, in recreation, and in attitudes toward morals.

Under the modern economy, the material plane of living has been greatly raised for the masses of the people. The average unskilled worker in the United States today has many more conveniences than did royalty in the days before the Industrial Revolution, when kings and queens were without radios, electric refrigerators, and automobiles. Even bathtubs with running water were not common among the aristocracy of the agricultural era.

The higher standard of living of the mass of the people was made possible by mass production. Prior to the use of steam as power, there was little mass production except in a few items such as printing. Mass production rests on machines, for a man working with a machine can produce much more than without one. With the mechanical cotton-picker one man can pick about as much cotton as 20 hand pickers.[12] So the higher standard of living is due to increased production per worker, which in turn rests upon machines.[13] The high salaries and wages make possible the mass production of such complex and expensive objects as automobiles; and perhaps helicopters will be mass-produced in the future.

In the United States in 1850, before the Industrial Revolution had developed very far, a worker produced 34 cents (1950 prices) worth of goods per hour, but in 1944 he produced $1.94 worth, or about six times as much.[14] Another way of showing how increased efficiency of production has raised our income is the following. In 1950 the labor force of the United States produced 204 billion dollars of income to spend. But if this same labor force had worked at the same rate of productivity as in 1900 — that is, with the same tools and machines and for the same number of hours — they would have produced only 79 billion.[15]

The application of inanimate power to metal tools and machines brought changes in social classes and a different type of distribution of wealth. In the household economy there had been slaves, serfs, peasants, and rich large landowners. But with factories the wage earners of the cities were a new low-income class, called in European writings, the proletariat. The rich were designated capitalists.

The inequality in incomes is shown in Table 31. In 1953 in the United States, the richest fifth of those with incomes received 44 per cent of the total income, while the lowest fifth received 2.6 per cent. The inequality is probably greater in most other countries. It was a little greater in the United States in 1939 when the top fifth received 49.3 per cent as compared with 44 per cent in 1953 and the poorest fifth received 3.4 per cent as compared with 2.6 per cent. Recent changes in the United States have lessened somewhat the differences between incomes of the wealthy and the poor.

These figures, however, do not represent the incomes which the recipients were free to spend since there is an income tax progressively greater for the higher incomes, and the amount collected, particularly from those receiving very large incomes, has been quite a large proportion, especially since the beginning of World War II. Thus a person who earned $350,000 a year in 1953 paid in federal income taxes approximately $281,000. This person's "take-home pay" was not

Table 31 · The Distribution of Income from Wages and Salaries, United States, 1939 and 1953*

Recipient	1939	1953
Lowest fifth . . .	3.4	2.6
Second fifth . . .	8.4	9.7
Middle fifth . . .	15.0	18.1
Fourth fifth	23.9	25.4
Highest fifth . . .	49.3	44.0

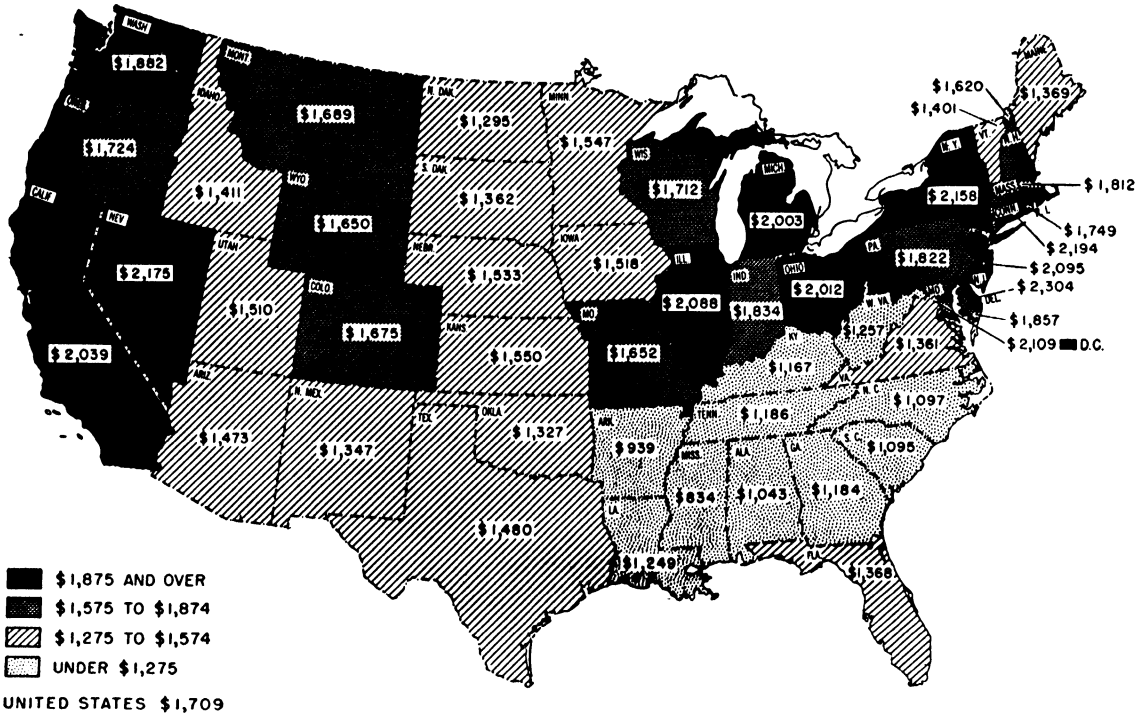
*Data from *Statistical Abstract of the United States*, 1955, p. 302. Incomes are before taxes.

[12] G. Gwyn Sutherland and H. Brooks James, *Mechanical Harvesting of Cotton, Robeson-Hoke County Area*, North Carolina, U.S. Department of Agriculture, A.E. Information Series, No. 53, October 1956.

[13] W. F. Ogburn, "Technology and the Standard of Living in the United States," *American Journal of Sociology*, 60: 380–386, January 1955.

[14] J. Frederic Dewhurst and Associates, *America's Needs and Resources* (New York: The Twentieth Century Fund, 1955).

[15] W. F. Ogburn, *op. cit.*



189 **Per Capita Income by State, U.S., 1953**

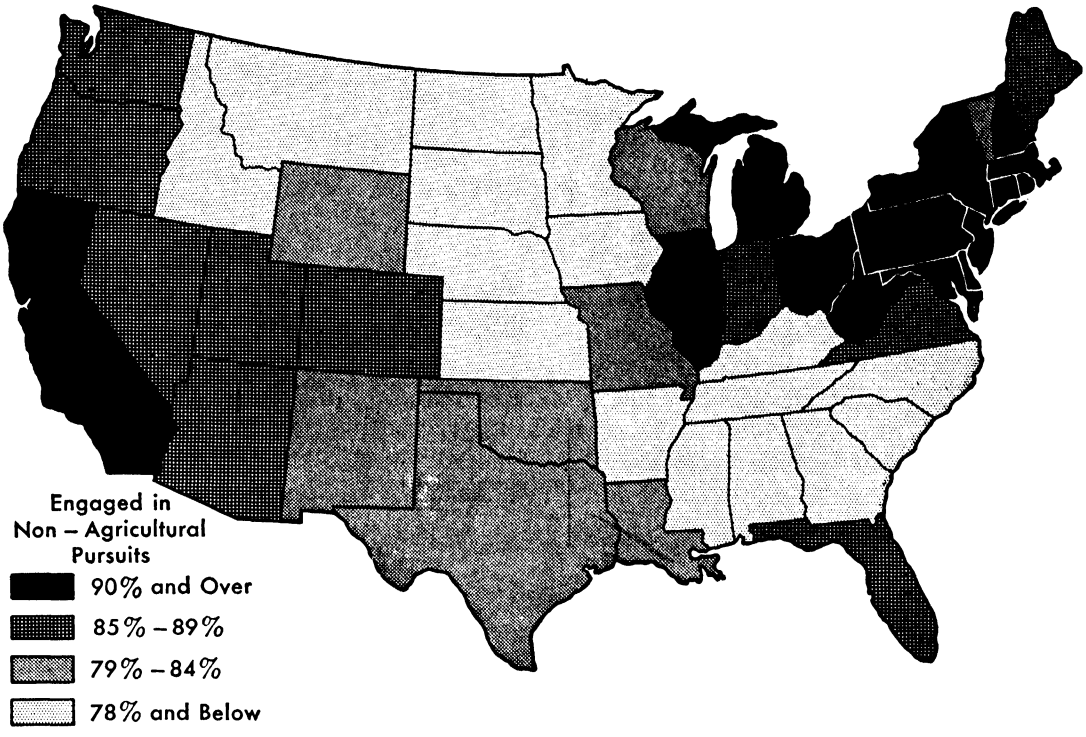
The states with highest per capita incomes are generally those with the largest urban population, with large commercial farms, and with small families. The states with the highest per capita incomes and the largest populations are, in turn, the best markets for goods and services. (From U.S. Department of Commerce, Office of Business Economics.)

$350,000 but $69,000. The distribution of income is further modified by the provision for those with low incomes of many free or nearly free services, such as schools, libraries, relief money, and insurance against unemployment and old age.

There are, however, some who see such an unequal distribution of income as just, for they argue that the higher incomes are the result of superior ability and that those with little ability, rightly, should not receive so high an income. Variation in wealth is seen as caused by variation in ability. It is true that some are more able than others by nature. The distribution of such inherited ability is thought to be shaped like the contour of a bell, with few of great ability and few of little ability and many of ordinary abilities. Such is the shape of curves of nearly all biological traits, such as stature and weight. The curve of mental ability of students entering colleges, as shown by psychological tests, is bell-shaped like that of the normal probability curve. In Figure 191 is shown the distribution of the mental abilities of 49,229 students entering 203 colleges in 1933, as measured by the psychological tests of the American Council of Education.[16]

The curve of mental ability in Figure 191

[16] L. L. Thurstone, "Primary Mental Abilities," *Psychometric Monograph*, No. 1 (Chicago: The University of Chicago Press, 1938), p. 21. The form of the distribution is affected somewhat by the design of the tests, yet not wholly so. For the same tests were given to a selection of 103 students of highest mental ability, and the form of distribution of these selected students with this same test was like a normal probability curve.



190 **Proportions of the U.S. Population Engaged in Non-Agricultural Pursuits**

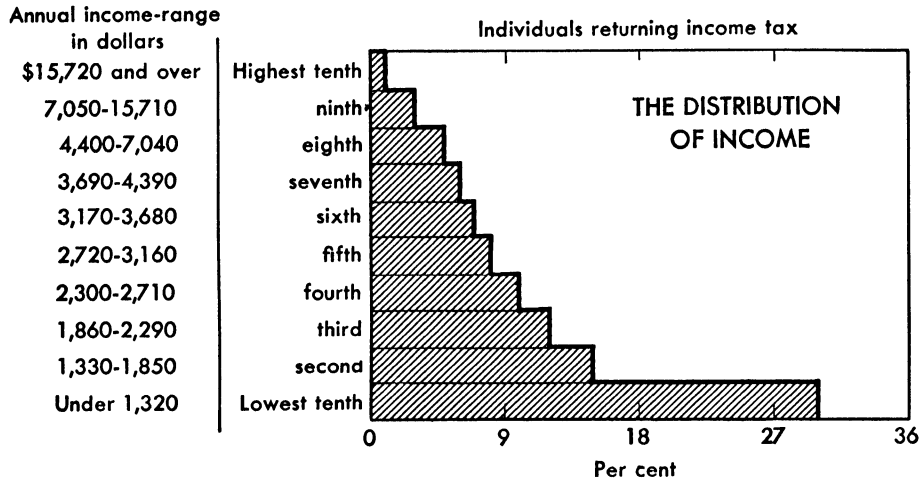
The states with the largest percentages of persons employed outside agriculture are generally the states with the highest per capita income. This fact is seen in comparing the shadings of the states in Figure 189 with Figure 190. That agricultural workers have lower incomes is probably true over most of the world. But there are exceptions, notably in Britain and New Zealand. In the United States, as Figures 189 and 190 show, the new western states with large percentages in agriculture have higher incomes than the older states of the Southeast with similar large percentages in agriculture. Why is this? These figures also throw light on political behavior. (Data from U.S. Census of Population, 1950: *U.S. Summary, General Characteristics,* Table 83, pp. 1–135.)

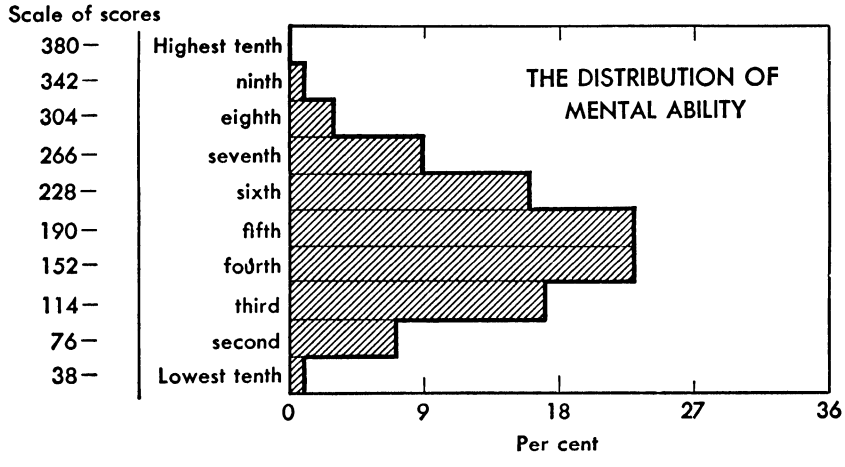
is quite different in shape from the curve of the distribution of income. The one resembles the outline of a bell, and the other is like a right angle triangle. The curve of income distribution, like the distribution of the personnel of the army, is shaped in part by social determinants as well as by heredity.

Observers of social classes since the Industrial Revolution often note that the "proletarians" of the cities do not own the tools with which they work and have no income-bearing property, facts which no doubt color their political views. However, income from property does not go exclusively to the rich. In the United States, of all those males with incomes between $2,000 and $3,500 dollars in 1953, 12 per cent received some income other than from their earnings. Income from dividends, interest, and rent probably affects the political and economic views of the recipients.[17]

Under private capitalism in the United States, the average family income, in money of constant purchasing power, doubled dur-

[17] U.S. Bureau of the Census, *Current Population Reports: Income of Persons in the United States, 1953,* Series P–60, No. 16, Table 7, p. 20.





191 Do the Rich Have More Brains?

If the amount of money we make depends upon the mental ability we have, then the distribution of income shown in the upper half of the chart would match that of mental ability shown in the lower half. Some correlation between mental ability and income is compatible with distributions shown by charts; but there must be a great deal of mental ability among those with low incomes. Why are the shapes of the two charts different?

The income chart is based upon income tax data for 1945, taken from the *Statistical Abstract of the United States* for 1948. The mental ability chart is based upon scores made on psychological tests (American Council of Education) taken by 40,229 students entering 233 colleges in the United States in 1933. Data are from the *Educational Record* for April 1934.

ing the first fifty years of the twentieth century, and urban poverty has been reduced about 85 per cent during that time.[18] The greatest amount of poverty at the mid-century in the United States is in rural areas, and especially among non-white populations, though there is some urban poverty, too.[19]

[18] W. F. Ogburn, *op. cit.*

[19] Staff of the Subcommittee on Low Income Families, *Characteristics of the Low Income Population and Related Federal Programs*, 1955.

PROBLEMS OF ADJUSTMENT

With our modern economic institutions, are we better adjusted or less so? With the speed of turning wheels and moving machinery there are more accidents than in the age of handicrafts, though probably not so many as in the hunting cultures where big game was pursued. In the United States there are some 10,000,000 disabling accidents per year — of which 100,000 are deaths — an accident a year for every sixteen persons, and a death by accident for 1,600 persons. But the total death rate has been lowered to 9 or 10 per thousand from perhaps 35 or 40 per thousand.

Conditions of work. In the early factories in England, children worked twelve to fourteen hours a day, much of the year starting work while it was still dark and leaving after dark. Hours of labor were around sixty a week one hundred years ago. Some factories were not sanitary, and in others workers were stricken by industrial diseases. But by the middle of the twentieth century, working conditions have been greatly improved.

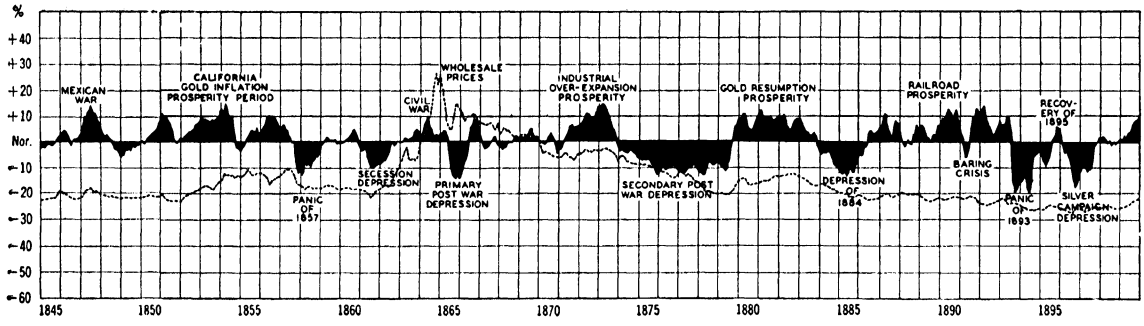
Work in factories is repetitive, speedy; and, with minute division of labor, it is not highly varied. Therefore, the modern factory worker does not feel the joy of creation. But he has more leisure time apart from the job in which to be creative or to play or relax than the worker of the past. Even as machine power and mass production up-graded unskilled laborers into semi-skilled operatives, so the promise of automation is in part that it will up-grade semi-skilled operatives into highly-skilled technicians. Some see in automation the prospect of increased unemployment for the worker, whereas others like Norbert Wiener anticipate the greater "human use of human beings" owing to greater stress on the use of the mind.

Working conditions are now greatly improved. Social legislation was partly responsible, as were shrewd and farsighted employers who saw that improvement was good for the quality and quantity of output. Lately sociologists have shown the way to better relations among all concerned in factory production, as described in a previous section of this chapter.

Business depressions. In the agricultural era there were crop failures which brought hunger and sometimes death by famine. In the industrial era there are business depressions that bring business failures and unemployment. These hard times come because production increases faster than does the demand for the products at the prices charged. Hard times alternate with good times as shown in Figure 192. In the bad years businesses fail and workers lose their jobs. Figure 194 records the business failures and the unemployment from 1929 to 1954. The number of unemployed per 1,000 workers is much greater than the number of business failures per 1,000 businesses. The averages per year are 98 unemployed and 5 failures per 1,000. In the long stretch of years of good business since 1940, the unemployment has been around 3 per cent and business failures about 0.3 per cent. But during the great depression of the 1930's, failures were approximately 1 per cent and unemployment 20 per cent.

It has been said that business depressions eliminate the weaker businesses and thus encourage efficiency. The same idea was once expressed regarding the unemployed. But the loss of a job in a depression is not the fault of the worker in the sense that the failure of a business is the failure of the owner. When masses of unemployed exist, there is no selection on the basis of ability. The workers lose their jobs because great numbers are laid off or because the factory shuts down.

Unemployment is a terror to the wage earner and a tragedy to his family. A business depression is a great loss to the



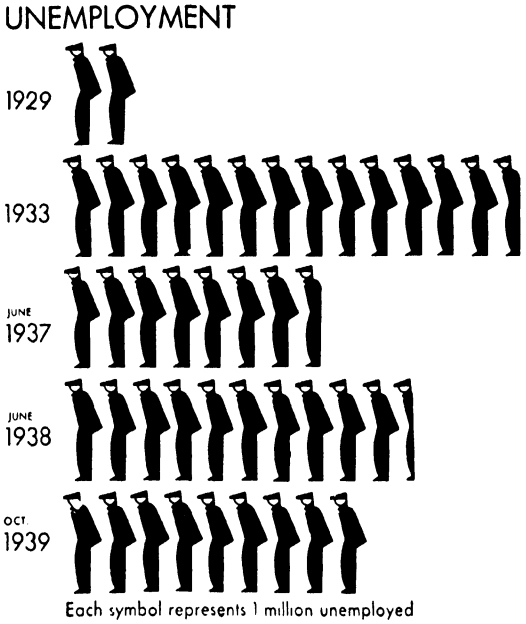
192 The Business Cycle

Business conditions alternate from good to hard times. When the latter are very severe, great tragedy and suffering are caused to business and all of society. These violent swings are one of the problems of the capitalistic system. (From The Cleveland Trust Company, Cleveland, Ohio.)

country. The unemployment of 1930–38 amounted to a loss of 43 million man-years of employment in the United States.[20] Also in this decade of business depression, 165 billion dollars of income, as measured in 1940 purchasing power, were lost. There were idle factories, idle skills, idle mines, idle money. All the ingredients existed for production, but they could not get together in an operating whole. The bad adjustment of production to purchasing power leads to bad individual adjustments.

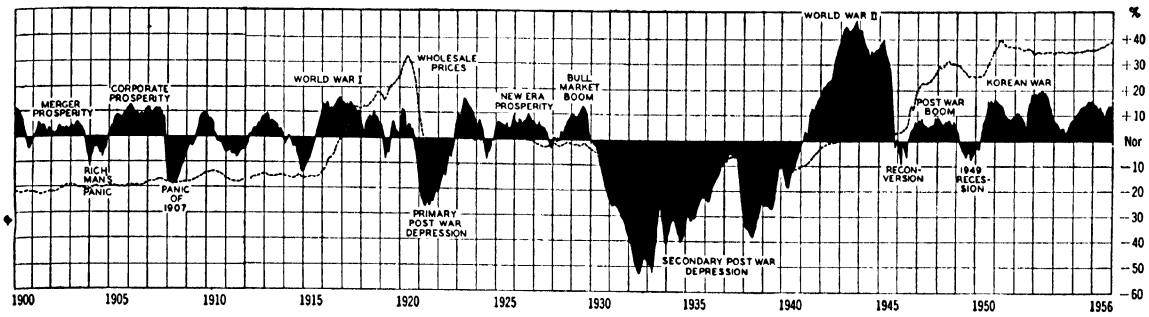
During the good times of the 1940's and 1950's there was optimism over the prospect of reducing the intensity and duration of depressions. But in the 1920's prior to the depression of the 1930's there was optimism, too, for it was said then that depressions had

[20] Statement of Isador Lubin before the Temporary National Economic Committee, *Investigation of the Concentration of Economic Power*, Part I, 1940, p. 13.



193 Unemployment in the Depression of the Nineteen-Thirties

Unemployment in the nineteen-thirties reached tremendous proportions. It is one of the greatest tragedies that can happen to man and cannot be fully realized by those who have not experienced it. Even in the fairly prosperous year of 1937 there were about eight million unemployed. (From American Federation of Labor, *Monthly Survey of Business*, No. 97, November 1938, No. 2, p. 41.) The "true" number of the totally unemployed in 1937 is estimated to lie between 7,822,912 (the number responding to the special request of the federal government for voluntary registration of unemployment) and 10,870,000 (the number indicated by the partial enumerative check-up). (*Final Report on Total and Partial Unemployment, 1937*, Washington, Government Printing Office, 1938, Vol. 1, p. xvi.)

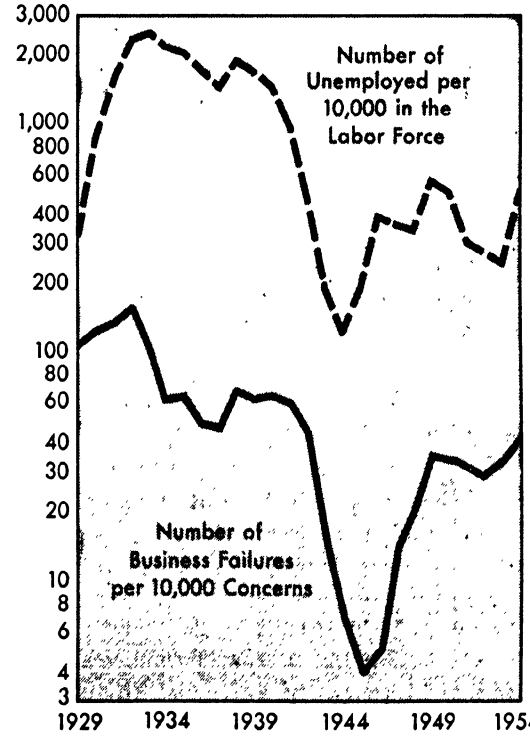


been banished. Difficulties lie in our lack of knowledge (but not of theories) of causes and also in the difficulties of administration and policy-making. Perhaps the fluctuations of business will be lessened in time, though hardly eliminated.

Big business. Bigness is frequently said to be a characteristic of modern economic institutions. General Motors had assets of 6 billion dollars in 1956. Standard Oil of New Jersey, with assets of 7 billion dollars, has wells, refineries, and sales outlets scattered over the world. The American Telephone and Telegraph Company in 1956 had 1,450,000 stockholders.

Not all businesses are big, though. There were (in 1952) 255,000 establishments employing fewer than 250 employees or 96 per cent, with an average of 25 per plant, whereas those that employ over 2,500 are only 0.2 per cent of all the establishments, with an average of 5,000 per plant.

The problem of the big size of economic institutions lies in their power, particularly the power to control prices. If a single company manufactures all the corn-binders made, it has power over the prices of corn-binders; though, if the prices are high, few will be sold. The fewer firms the greater is the opportunity for reducing the range of competition. Thus four companies produce 90 per cent of the output of cigarettes. By contrast, it is difficult for several hundred thousand cotton farmers to control the price of cotton. Table 32 shows a sample of industries in 1947 with the percentage of output in those industries from the four largest companies. In contrast to the cigarette industry, there is little concentration among the makers of women's suits and coats.



194 Unemployment and Business Failures, United States, 1929–1954

Business failures and unemployment increased sharply in the depression years of the thirties, and rapidly declined in wartime. Being without jobs and going bankrupt contribute to the pessimism of the time, while optimism comes with prosperity, as do many other social attitudes.

Table 32 · Output of Selected Industries in the United States Concentrated in the Four Largest Manufacturing Companies, 1954*

Industry	Percentage of Output
Cigarettes	82
Tin cans	80
Tires and inner tubes	79
Motor vehicles and parts	75
Blast furnaces	65
Copper rolling and drawing	53
Motors and generators	50
Metal stamping	14
Commercial printing	10
Saw mills and planing mills	7
Dresses	4
Women's suits and coats	3

**Statistical Abstract of the United States*, 1957, p. 795.

The four largest companies produce only 5 per cent of the output.

These few big companies, even though they control a large proportion of the output are nevertheless competitive, generally, and some quite keenly so. For they may compete often with companies in other industries which offer substitutes. Thus a purchaser may buy rayon clothing instead of cotton, or synthetic rubber instead of natural rubber. These big industries compete for the consumer's dollar. A television set may be bought instead of a "deep freeze" box.

However, these large companies show power in other areas than prices. They possess, because of their size, certain advantages over little businesses, as in advertising or purchasing. Their power may be coordinated, as, for instance, in regard to lobbying for legislation to control labor unions. This coordination is helped by the fact that the president of one company may be on the board of directors of several other companies. Big business acts somewhat in concert on some political issues and on national policy.

Wealth has always had power, in the agricultural era as well as in the industrial. The maladjustment appears in the lack of protection of the weak or the small. This need of correcting and preventing the abuse of power does not invalidate the obvious excellent achievements of great productive units.

Imbalance in the social system. The rapid development of economic institutions in size and in power since the coming of steam and steel has led to an imbalance in the social system, as shown in the labor struggle, in the protests of little businesses, in governmental regulations and legislation. The attempt to adjust to these great centers of power in the economic institutions and to control or regulate them led to such close connection with government that the subject of economics was called political economy. But economic institutions are not only to be balanced with the governmental institutions but with all the other institutions of the social system. Economics may yet become social economics.

SUMMARY

Economic activities are a proper concern of the sociologist because economic and other aspects of social life are closely interrelated. In the hunting cultures where our present elaborate economic organization had its humble origins, there is no separate economic organization such as we have today. There is a division of labor between men and women, and the family carries on important economic activities, which are supplemented by those of the community.

Since the early hunters are self-sufficient, they do not depend on trade. Within the community, the chief mechanisms of exchange are hospitality and gifts. Services are rendered or goods given without pay-

ment but with the expectation of a later return in kind. Land and food are shared but there is also private ownership of personal property such as clothing, weapons, and songs. Because material goods are scarce, primitive people generally strive not so much for private gain as for status and reputation.

The development of agriculture and of the parallel pastoral economy meant a more certain and substantial food supply, a larger population, and further development of the handicrafts which led in turn to trade, exchange, payment, and specialization. Eventually the pastoral and agricultural economies were brought together in the farm as it appears in the historical period.

Another great step forward was taken with the development of power beyond that supplied by human beings and domesticated animals — especially the development of steam in making steel tools, later augmented by electrical power and industrial chemistry — which contributed fabulously to the enrichment of our material life.

The older family and feudal economic organizations were not adequate to finance the new abundance. The extensive use of money ushered in capitalism; the application of steam power to tools brought the Industrial Revolution. There were actually two revolutions, one in goods and services, and the other in the many social institutions closely linked to the economic activities. Thus the Industrial Revolution brought drastic changes to the family, to cities, to social classes; changes sometimes resulting in serious maladjustments. For instance, human relations in industry are affected by social factors like the large size and impersonal nature of the modern factory which may result in low morale among the workers, and in friction between workers and management. Also our complex economic system depends for smooth functioning on the synchronization of many parts which are easily thrown out of gear, with resulting depressions and unemployment.

When business declines, production is cut but not necessarily prices, because of the growth of monopolies fostered by the large-scale capital requirements in certain lines of business. As a protection, government undertakes to prevent large monopolistic enterprises, to regulate them, or to absorb them. The regulation of economic activities by the group is not a new phenomenon but is as old as society itself. Only the form of the control, which changes with changing conditions, is new.

QUESTIONS FOR DISCUSSION

1. How does the economic role of the family in primitive society compare with that in modern society?
2. Is it a good thing for men and women to share the same jobs, or is a sharp differentiation of labor more desirable? Why?
3. What is the role of hospitality and gift-giving in the economic life of nonliterate peoples? What is its role today?
4. What, in your opinion, are the advantages of the economic organization of primitive hunters over modern economic organization? What are the disadvantages?
5. Does man's long economic experience throw any light on which is the stronger incentive: working for the welfare of the whole group or for one's own profit?
6. How does the incentive of reputation compare with the desire to gain property, in stimulating economic activity?
7. How and why do social relations involved in production differ in the household economy and in industrial society?
8. How is the origin of the city related to specialization and the development of the handicrafts?

9. What is the social significance of increased specialization?
10. How are recent power and chemical inventions likely to affect the growth of the economic organization?
11. What are the advantages of viewing a factory as a social system?
12. Do machines create jobs for more persons than they displace?
13. What is the social significance of the displacement of horses and mules by tractors on U.S. farms?
14. What are the social effects of the doubling of average family income, in money of constant purchasing power, during the first half of the twentieth century in the United States?
15. How do inequalities in wealth under capitalism compare with those which existed under feudalism?
16. How has the rapid growth of economic institutions in size and power led to imbalances in the social system?

TOPICS FOR REPORTS

1. The social implications of recent changes in division of labor between the sexes.
2. A comparison of labor relations in feudal and modern society.
3. Social effects of the mechanization of agriculture.
4. Hospitality as an economic function.
5. Economic organization of a rudimentary society like that of the Andaman Islanders.
6. Social consequences of increasing economic productivity.
7. Informal social organization in a factory.
8. Social aspects of automation.

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This well-known student of modern capitalism discusses briefly the dramatic and radical changes that have taken place in the twentieth century. A series of lectures.

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18

The Governing Institutions of Society

Government is one of the major factors in our lives today. When we are born our birth must be registered with the government. Governmental regulations regarding sanitation and contagion protect our childhood. Education is furnished for us by the government. We must get the government's consent to marry. In building a house to live in we must conform to the legal specifications regarding space, light, plumbing, and water. A fair-sized proportion of all the money we earn must be paid to the government in taxes. State policies affect the price and amount of food and clothing and fuel we consume. They also regulate our recreational activities and tell us what we can and cannot do. In many countries government provides medical care for us when we are sick, gives us aid when we are out of work. It protects us from enemies on the outside of our state and from hazards within our community. It forces us to send our children to school and will not let us permit them to work for pay until they become of a certain age. If we would travel outside our country, we must first secure permission from the government. Nor may we separate from our mates and marry again without the consent of governmental authorities. If the state is in danger we fight for it. As we become too old to work, the government helps to take care of us. Even death must be registered with the government, and if we have no money for a burial the government will bury us. So from the cradle to the grave every day of our lives we come in contact, directly or indirectly, with the government.

GOVERNMENT IN THE SIMPLEST MATERIAL CULTURES

Among the peoples living today with the simplest material cultures, government is very slight and hardly discernible. Such peoples are, for example, the Andaman Islanders, the Tierra del Fuegians and the Bushmen. They have no specially constituted government, as may be seen from the fact that they have no established rulers. "There is not," writes Thomas,[1] "one story about a chief or a chief's daughter in all Bushman folklore known to me." The Ona of Tierra del Fuego are likewise without constituted leadership. When a special occasion arises which calls for group action, a temporary leader may be selected. In the case of murder, a relative of the man to be avenged is generally chosen to lead the punitive expedition.[2]

Small bands and very little communities do have a "headman," who exercises leadership when occasion demands it. Indeed many groups of lower animals such as horses or wolves have leaders. Leadership among baboons occurs as dominance over a family group,[3] sometimes quite large.

[1] W. I. Thomas, *Primitive Behavior* (New York: McGraw-Hill Book Co., Inc., 1937), p. 422.

[2] R. H. Lowie, *An Introduction to Cultural Anthropology* (2d ed.; New York: Rinehart & Company, Inc., 1940), p. 223.

The headman in these simple groups has no sharply defined power, and the position is generally not hereditary. The position is attained through various abilities — abilities of a physical kind, for example, when he is a mighty hunter and saves the band from a winter of starvation, or mental abilities, when his judgment is good about weather and the timing of seasonal migration. The headman also has skill in dealing with people. He is thus a "natural leader of men," or what Max Weber calls a charismatic leader. At one time his role is that of a judge, at another, as in hunting, that of the chief executive. There seems to be in him little of the legislator, however. Often there is around him a group of elders, who play the role of an advisory council.

There is limited need for government in the simpler cultures. There are several factors that diminish the need for government among peoples with simpler cultures. One is the size of the groups, which are small in comparison with modern communities. Among food-gatherers and hunters the supply of food is not large enough to maintain a big population. The communities usually range in size from 15 or 20 persons to 150 or 200. Under the circumstances, each person knows every other person well; gossip and public opinion are always available as potential sources of social pressure. In a large modern community with its impersonal contacts, things are very different. Indeed it may be doubted that any practicable system of policing can be supplied which is entirely adequate to the needs of a modern city. ". . . the New York City police force," writes a former Commissioner,[4] "is not large enough and never will be, to control all the cellars, back yards, vacant lots, and other places where . . . offenses are committed." A small group is much simpler to govern than a large one.

A second characteristic of these simple societies which makes a formal government unnecessary is the stationary character of the culture. When social conditions are the same for long periods of time, lessons may easily be learned from experience and the best ways of doing things may be worked out and made known to each member of the group. Elders, like our libraries, become storehouses of this knowledge. In a heterogeneous, rapidly changing culture like our own, on the contrary, many different points of view and conceptions of right and wrong develop, which pave the way for misconduct. There would thus seem to be less provocation to wrongdoing in a simple society than in one which is complex and rapidly changing.

Finally, a third condition is the scarcity of property. Most of the crimes today are against property. In a very small community the personal property of each individual is known to every other individual; hence there is not much a thief can do with stolen goods, especially if trade and travel are little developed. Causes of discord are adultery, jealousies, malicious gossip, personal friction. In the absence of property, there is great concern about reputation, reflecting an extreme sensitivity to the opinion of others. A good reputation is a proud possession.

In modern times, government is thought of as the chief agency of control, partly because the function of keeping order is formalized and may utilize physical force. But there are many other ways of keeping order than by the use of governmental authority.[5] In simple cultures when there is little formal government there are nevertheless many procedures for control.

Very important among these is the opin-

[3] Solly Zuckerman, *The Social Life of Monkeys and Apes* (New York: Harcourt, Brace & Co., Inc., 1932).

[4] A. H. MacCormick, "New York's Present Problem," *Mental Hygiene,* 22: 4–10, January 1938.

[5] Edward A. Ross, *Social Control* (New York: The Macmillan Company, 1918).

ion of others, discussed in Chapter 9, manifested in critical comment, blame, ridicule, shaming, and gossip. These hostile opinions of others restrict individual behavior to the conventional. At the same time there is a positive stimulus to approved behavior in the opinions of others who bestow praise and applause. Among the Crow Indians, for instance, the extravagant praise a lad gets for feats of daring such as stealing the horse of an enemy chieftain is a regulator of this conduct.[6] His choice of a mate is facilitated by such bravery. Among the Eskimos singing contests involving repartee and ridicule determine the behavior of leaders. Among many primitive tribes without much property, false gossip or slander is considered one of the gravest of offenses. The opinions of others are powerful because our very conception of ourselves is derived from the opinion of others.[7]

The opinions of others in a group or community are on the average much more effective if the members are few and each one knows every other one, and sees and talks with the others face-to-face frequently during the day. In a large city where one citizen is unknown to nearly all the others, gossip has in general little force and in its stead police are needed.

Citizens in our democracy boast that they have freedom because they are not, as in certain totalitarian states, threatened by laws, police, and imprisonment for voicing opinions. But freedom to talk is restricted by these informal social pressures based upon the opinion of others as well as by threats of jails. A citizen of the United States would hardly have been free to praise Hitler during World War II, even though he would have been free from arrest. Informal pressure would probably have prevented such expression, even if he had wanted to speak of what he thought were good qualities in the German Fuehrer.

Primitive peoples have norms to maintain order, but they are like the common law and are called customs, folkways, or taboos. They are, of course, not written. Primitive peoples obey the law, as we practice good manners or follow the rules of etiquette, because of the fear of the opinions of others. The opinions of others on breaking taboos is supported by the sanctions of religion, or the fear of personal harm through some force of a magical nature. In a simple stationary society, where acts are repeated over the centuries without change, and the ways of doing things, proven by long practice, are the same for great-grandparents as for great-grandchildren, there is approval and admiration of conformity, and conversely a distrust of eccentricity and nonconformity. Children are brought up with great respect for these approved ways of acting.

There are various other ways in which order is maintained without written law, police, and state authority. For instance, imitation of socially valued individuals such as heroes or industrious workers tends to induce conformity, although theoretically one might imitate a disruptive person as truly as a constructive one. It is the imitation of what is highly valued socially that counts in ordering the group.

Institutions other than the state are also concerned with orderliness in society, as for instance, in our society, the family, the schools, and the church. In primitive society, the role of the family is especially important in governing small units within the community. Thus we have the expressions matriarchal and patriarchal types of families, implying authority. Even in the mountainous and semi-isolated areas of modern society, the family resists the intrusion of courts and peace officers in dealing with af-

[6] Robert Lowie, "Takes-The-Pipe, a Crow Warrior," in E. C. Parsons, *American Indian Life* (New York: B. W. Huebsch, Inc., 1922), pp. 17–33.

[7] G. H. Mead, *Mind, Self, and Society* (Chicago: The University of Chicago Press, 1934).



Standard Oil Company of New Jerse

195 Gossip as Government

In small communities without organized government, gossip (which is not confined to women) is a substitute for police. The fear of gossip controls conduct. If we consider gossip as an expression of the opinion of others, and not as necessarily malicious, it is also educative for children, on morals. It may make or unmake a good reputation, more highly valued than riches, especially in small villages where wealth is rare.

fairs which they think are functions of the family, such as feuds, duelling, making liquor, etc.

Families are not only important in maintaining order, but family conflicts are sources of disorder, especially in societies where property in land and goods has developed. Such feuds arise over boundaries, animal-stealing, dowries, marriages, and fights which are backed by family support and loyalty.

Various associations have also some responsibility in maintaining order within segments of society as, for instance, age societies, sex groups, and secret orders. For example, among the Kai, Tami, Yabim, and Bakana tribes of Northern New Guinea the initiated men are organized into a religious brotherhood, called the Bull-Roarer Society, which has as one of its principal functions the discipline of the women and the uninitiated males of the community. With much secrecy, they twirl rapidly great flat pieces of board, having serrated edges, tied to a strong string. This twirling makes a noise like a mysterious monster. Other symbolisms impress the uninitiated.

Thus it may be said that among the lower hunting cultures several different organizations maintain order, deal with crime, and enforce discipline. The question arises whether there is present also a separate organization whose main function is governing, as is the case with the government in

modern society. Was there a state in the lower hunting cultures? Has there always been a state? Or was it a social invention occurring later than the early cultures? If it was a social invention, how did it originate?

THE POLITICAL STATE

A state is an organization which rules by means of a supreme government over a definite territory.[8] The state maintains order through a government, though other aids are used in ruling, as, for instance, common law; and not all government is synonymous with state, for there is private government. However, government is so important a feature of the state that the two words are often used interchangeably. Also the state involves the concept of a territory whose boundaries are known. Wandering tribes are not so boundary-limited and do not have a state. The state has an over-all government, which is sovereign and supreme in authority over other governing agencies and other groups.

The state is largely a political organization, but it is tied so closely to its social setting that it cannot be known well without an understanding of the rest of society. Nor can other social institutions be fully understood without considerations of government and state.

Peoples who live by hunting generally do not have a state, for they have no organized sovereign government separate from other social organizations, nor a demarcated territory. The need for such a supreme government arises when two or more communities are united under one rule, or when a city in a river valley has to protect its trade routes.

[8] As defined by Robert MacIver, "a state is an association which acting through law as promulgated by a government endowed to this end with coercive powers maintains within a community territorially demarcated the universal external conditions of social order." — *The Modern State* (Oxford: The Clarendon Press, 1926), p. 24.

The function of maintaining order, though prominent in the origin and development of the state, is not the sole function of the state. The state also renders services to its population such as settling quarrels, righting wrongs, defending against aggression, paying minor leaders for military support, etc.

The origin of the state. Before the state took definite form in an organized government over a delineated territory, there were rudimentary beginnings.[9] Thus the hunting party often has a leader, as when the Masai round up lions who raid their cattle. Such a leader's authority is like that of the leader of a war party. In other cultures the heads of families may get together to decide a course of action, and their decision is supreme. Reprisals of one sort or another as in head-hunting raids constitute authority over collective action. A good example of the beginnings of a larger group unity is furnished by the experience of the southern Bushmen, who were described above as living in small groups without definite leadership or government. In periods of crisis they resort to organization, as when they unite to meet the invasion of the Hottentots and Kaffirs.

These threads of authority do not get woven into the state, though, until there is war and conquest of territory. Early wars seem to evolve from stealing raids for stored grain, cattle, women, or slaves, but do not lead to dominion over territory. In early Norway, feuds between warlike farming households led to one conquest after another by Harold the Fairhaired and led to the imposition of tribute, called "scat," which had to be collected, sometimes by armed force or by physical threats.[10] He used this tribute to collect and pay for his retinue, which enabled him to collect taxes and han-

[9] Robert H. Lowie, *The Origin of the State* (New York: Harcourt, Brace & Co., Inc., 1927).

[10] *Heimskringla Saga* (Everyman's Library edition; New York: E. P. Dutton & Company).

dle revolt. Thus was the beginning of rule.

In ancient Peru, a somewhat similar series of conquests by the Inca led to the state. It differed from the Norwegian pattern in that the tribe rather than the individual farmer with a retinue made the conquests. The territory over which sovereignty was established was often not so large as in Norway or in the Inca Empire. In Ireland, for instance, the territory under a ruler was, say, no larger than a county.

But war itself must have been invented or have had a beginning. While fighting may be instinctive and common to many animals without culture, war between groups is an organized activity that it was necessary to learn. As Malinowski has observed: "To label all brawling, squabbling, dealing of black eye or broken jaw, war, as is frequently done, simply leads to confusion. War can be defined as the use of organized force between two politically independent units, in pursuit of tribal policy. War in this sense enters fairly late into the development of human societies." [11]

The incentive to war is greater where there is property such as grain, metals, and fine cloth and where land, because of cultivation, is the source of wealth. The need of labor seems at times to have led to wars in order to capture slaves. The state is fostered by the domestication of animals and the development of the plow culture.

War and the state. War is encouraged by new means of transportation. The radius of the group's action is thus increased. The domesticated horse, the longboat, the sailboat, and the airplane all tended to make one group impinge on another. The boat of the Vikings became an agency of aggression all along the western coast of Europe, as did the horse on the borderland between Asia and Europe. When the Plains Indians in America took over the horse from the Spanish, the tribes were thrown into closer contact and friction leading to war developed.[12]



196 Conquest Builds the State

Administration of conquered territory rests upon an organized government. The Incas, originally a small warlike tribe, conquered a vast territory; to administer it, they built a very capable authoritarian government which was at the same time a welfare state. To wage a war, a people needs an organization bigger than the village or the family. The growth of government owes much to war. The black spot on the map locates Cuzco, generally believed — but not definitely known — to be the place of "origin" of the Inca. The gray area represents the maximum expansion in the Imperialist Period. (After Bennett and Bird, *Andean Cultural History*, American Museum of Natural History, Handbook Series No. 15, 1949.)

[11] Bronislaw Malinowski, "Culture as a Determinant of Behavior," in Harvard Tercentenary Conference of Arts and Sciences, *Factors Determining Human Behavior* (Cambridge, Mass.: Harvard University Press, 1937).

[12] Clark Wissler, "The Influence of the Horse in the Development of Plains Culture," *American Anthropologist*, 16 (1): 1–25, January–March 1914.

War is also stimulated, once the inventions of war and a tradition of war are established, by differentials in inventions of conquest. Where one group has a great superiority in tools of fighting over another group, there may be a temptation to acquire the booty of war since victory is not too difficult. Thus the possession of the horse and the use of cavalry led to a great superiority over those without it, and tribes with horses were often warlike. There may be some, though, who question whether this generalization applies to those who first possessed airplanes and atom bombs.

War, piracy, and raids develop agencies of discipline, especially when tribute is exacted from the conquered peoples. When a war leads to slavery of the conquered peoples, another step in the development of rule is taken.

The war chief was a factor in the origin of the state. A leader seems to arise at times almost spontaneously in any group, as the leaders appear at hunting parties, in festivals, and in ceremonies among the old men; the idea could be taken over in war, even if the exigencies of war did not make the need fairly obvious. The hereditary transmission of leadership is a later development. It is found widely scattered in Africa, Polynesia, and Micronesia, but rarely among the American Indians. The hereditary factor in leadership is correlated in primitive society with the inheritance of property and with the idea of social class or caste. Since these were generally lacking in the Americas, the democratic principle was more in evidence here.

These war chiefs were in our language early called kings, even though their kingdoms were quite small. While the king was a war leader and maintained his sovereignty by military skills, in the administration of a state he resembled the head of a large household. Indeed the model of an early sovereign's civil administration was that of a patriarch with a large farm with many workers, of whom some were favored kin. What such a farmer learned about administration would be useful to him in ruling a state. Like the headman of a hunting band and like the father of a family, he combined in himself the executive, judicial, and legislative functions of government.

The Evolution of the State

The control of conquered farmers, tribes, and communities by military force can for a time prevent revolt. To the subject people, the king is a tyrant; and a revolt is a fight for liberty and justice. Had such revolts succeeded, states would have remained small a much longer time. The large state would have been a long time developing, if its coming had depended alone on the growth of transportation inventions and the diffusion of custom, without the aid of conquest. It was conquest that united in the middle of the eighteenth century 49 separate and independent states into the Kingdom of Nepal, with an area the size of Florida. If there had been an effective United Nations then, would there still be 49 independent states with an average area of 1,000 square miles? Or would they have united as did the 13 American colonies? Will Nepal voluntarily unite with India? Ireland, though conquered by England, was never assimilated, and after many years of English rule successfully revolted. In early times, the island consisted of many kingdoms. Even now there are two separate governments.

The unification of disparate conquered units requires a long time. It is achieved through processes of accommodation and assimilation, discussed in Chapter 6. For the units to be integrated, there must be common interests, as in defense against invaders, common norms, or the mutual advantages of domestic trade. The feeling of solidarity is facilitated by a common language and similarities in customs. Linkages of travel

routes safe from robbers also aid in integration, as does division of labor. If part of a state is Mohammedan and part Christian, or part Muslim and part Hindu, unification is more difficult. The development from an unstable state to a naturally stable one is a long social process, rather than a military or a governmental one. Social integration, discussed in Chapter 6, is not only a need for families and cities, but it is the outstanding problem in international relations when peoples have different languages, colors, traditions, interests, and nationalities.

In this process, government evolves. It ceases to be merely a strong arm to prevent revolt and physical disorder.

The state takes more definite shape as the leaders do more things for the group as a whole. While collectivism of this sort is not very common among preliterate peoples generally, among the pueblo groups of the southwestern United States there are many functions undertaken for the group as a whole, such as the regulation of the time of planting corn, the disposition of certain lands, and the provision for ceremonies and festivals. The collectivistic idea was especially strong among the Inca, the preliterate people of Peru who, without the aid of a written language, built up an empire of three million persons along the South American coast,[13] comparable in size to those of Persia, Rome, and Byzantium. The Inca state rendered all sorts of services for the people, such as the frequent partition of the land among the dispossessed, the provision of steady employment, and the institution of old age insurance. Although the rendering of such services is not an essential part of the definition of the state, still it clearly helps to build up the state into a more significant entity.

In the states of Western Europe and in the United States and indeed in many parts of the world, the process of integration has gone so far that there is little danger of military revolts. The hereditary sovereigns with power have gone, but the central government is secure, though the persons constituting the government change. Because it is secure, the problem of maintaining peace within the territory is so reduced that the government has the opportunity of developing other functions, the expansion of which has been enormous. But before discussing these, a few paragraphs should set forth the underlying conditions of modern states.

GOVERNMENT IN MODERN TIMES

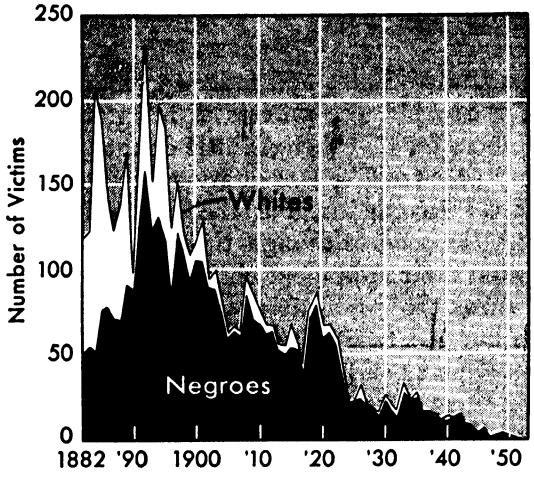
The setting of government in modern times differs in three ways from that of earlier times. First is the very large area governed; second is the complexity of social conditions in this large area; and third is the rapidity of change in the society being governed. These characteristics mean big problems and add up to big government.

Territorial size. The Aranda of Australia, whose material culture corresponded approximately to that of men of the rough stone age of some 20,000 years ago and earlier, controlled an area of about 7,000 square miles.[14] Today the government of U.S.S.R. controls 8,473,444 square miles. The areas of China, India, the United States, and Brazil are all large. To govern territories of such size presents problems of a magnitude not experienced by very small states, even though in modern times there are many contact inventions, such as boats, railroads, or telephones and radio, without which such large areas could not be governed.

Complexity of national life. It is heterogeneity rather than homogeneity which

[13] This estimate of population is made by A. L. Kroeber, "Native American Population," *American Anthropologist,* 36: 24, January–March 1934.

[14] Hornell Hart, "Technology and the Growth of Political Areas," in W. F. Ogburn (ed.), *Technology and International Relations* (Chicago: The University of Chicago Press, 1949), p. 30.



197 The Decline in Lynchings

Lynching, like feuding, means informal control by family and local community. The decline in lynchings is evidence of the growth of formal government, one function of which is to maintain order. During 1946, 22 persons were saved from mob lynchings, and in 1953, although there were no lynchings, at least 3 were averted. (Data from the *Report of the President's Committee on Civil Rights* and the Tuskegee Institute reports on lynching.)

describes the society of a large state. In the United States there were (in 1950) 22 different national stocks with over 100,000 foreign-born residents each; and four different races with significant numbers. The number of different religious bodies with over 100,000 members in the United States in the 1950's was 50. In the United States *Statistical Abstract* are listed 450 different occupations, and the census reports 20 groups and 250 subgroups of manufacturing industries alone. The manner of living differs widely too. In 1950 there were 25 million living on farms and following different kinds of farming, 13 million living in villages and small towns (incorporated) under 5,000 in population, and 21 million in places of over one million. Obviously with such heterogeneity as is illustrated by these figures, the problems are much greater than for a homogeneous people. These difficulties become apparent in the conflicting interests that are often manifest in the pressure groups trying to get their way and in the lobbyists who often want to obtain special benefits from the legislatures. Indeed such conflict in 1860–64 destroyed the government of the United States temporarily and very nearly permanently.

Change. Fifty years ago the automobiles in the United States were negligible in number. In 1955 there were 48 million. Within that time we have changed from an agricultural to an industrial nation. Only a little more than a century ago we were getting fire by striking flint on iron instead of striking matches. Such rapid changes mean that government is continuously facing the new. We pass a labor law at one session of Congress and discard it for another at the next session.

In the distant past, control was by custom. But the more rapid the change, the less reliance there can be on custom, precedent, and the past; and hence this source of aid and strength to government recedes. Governments find it difficult to keep up with changes. The various state governments should have passed workmen's compensation laws a half century earlier than they did.[15] Since it is difficult for governments to anticipate changes or even to adjust to them, lags tend to accumulate.

So much for the three conditions underlying modern governments. Let us consider next the three characteristics of modern governments, one an old one and two relatively new.

Characteristics of Modern Government

Government still has the function of maintaining order over its territory, but in addition government has come to engage in many activities other than keeping order, and an important question is just what other functions the government should perform.

[15] W. F. Ogburn, *Social Change* (New York: The Viking Press, 1922), p. 236.

A third feature of governments occasions the question of who should govern.

Keeping order. The problem of keeping order is somewhat greater for local governments than formerly, because of the growth of cities. Cities have much higher crime rates than do rural areas or villages. As property has increased there are many thefts and many lawsuits over property. The coming of uniformed police in cities — in London in 1829 — provided a needed machinery for handling the problem. Even so, enough police to maintain order in large cities seems an impossibility.

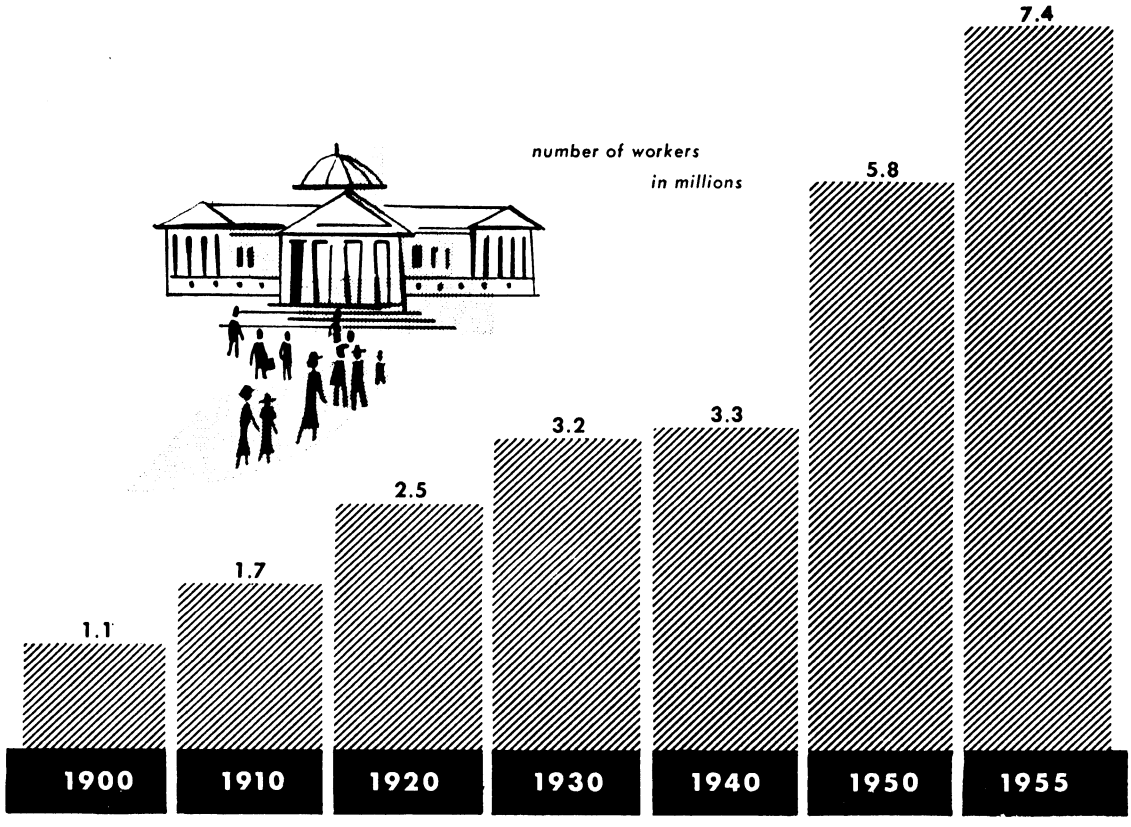
Political disorder is also a problem in many states, particularly in the countries of South and Central America, where political revolutions are frequent. Disorderly demonstrations also occur. The Fascists marched in Rome and took over the City. The Nazis used force in Germany, the Bolsheviks captured the centers of control in Russia in 1917, and there was civil war in the United States in the 1860's. The maintenance of order is difficult in empires. The Netherlands had revolts in Indonesia, and used armies to break the revolution in 1948. Civil wars have recently occurred in Spain, Korea, and China.

Other functions of government. Some of the activities of government are listed in the opening paragraph of this chapter. Great differences of opinion exist among the peoples of a country over what a government should do. At one time, the attitude was expressed by the slogan, "The government which governs least, governs best." This opinion was popular among the people when governments had been autocratic monarchies and when rulers had tried to control the economic activities of business and commerce, and in countries where the governments were imposed by foreigners as in the case of the thirteen colonies of America, which became the United States. In rural areas, where many affairs of life were handled by the family, as in the Southern Appalachians, the mountaineers could see little excuse for much government.

On the other hand the people who pay little to the government in direct taxes and who are the recipients of governmental services such as public schools, the collection of garbage, the provision of public parks, and aid to old people, do not oppose the extension of governmental functions. They look upon this type of government as a friend. However, the citizen who pays large amounts in income taxes or in property taxes is not so happy about the growth of governmental functions, since they cost money which he has to provide. No one seems to like to *pay* taxes, even though they buy very useful services.

There is some evidence to indicate that governmental functions increase inevitably without too much regard for these attitudes of opposition. Thus in the United States, governmental functions increased under the administration of conservative presidents as well as under the more liberal or progressive ones. Governmental functions increase under wartime presidents but recede somewhat after the war is over. Also, in most of the countries of the world the trend is toward the growth of government, even though the conditions are highly varied in the different countries. The increase in what the government does is at times a necessity. Thus if a country's security is in jeopardy, its government prepares for war and this means many executive undertakings. Furthermore, there are no other institutions so well suited to handling problems of wide scope. Such nationwide problems are beyond the efforts of the family, the church, and most businesses. This is not to say that there are not many functions which it may be unwise for the government to undertake.

One indication of the expansion of government is the number of governmental employees, as shown for the United States in Figure 198. The same trend shows up when



198 The Growth of Government

The number of civilian workers in the United States (not counting those in relief work) employed by state, local, and federal government at successive periods during the twentieth century. One in ten employees works for the government. (Data from Solomon Fabricant, *The Rising Trend of Governmental Activity Since 1900*, New York, National Bureau of Economic Research, 1952.)

governmental employment is expressed, not in absolute numbers as in the chart, but as percentages of all employed workers. For the same years shown in Figure 198 the percentages are 4.1, 4.9, 6.3, 7.1, 7.2, and 10.3. Thus nearly 1 in 10 employed workers works for the government.

Bureaucracy. The existence of a large number of governmental employees is called a bureaucracy, for the administrative unit under which they work has been called a bureau. The system of similar employment in large private business is called a private bureaucracy. Since a bureaucracy is also defined as a government by bureaus, bureaucrats are thought of as white-collar workers. The proportion of the labor force who work in bureaus for a government is quite large in Russia, where factories are owned and administered by the government. Also when the government of Britain nationalized the coal mines, the steel industry, and transport, bureaucracy grew greatly. There is a degree of permanence of employment in working for government; such large numbers are said to create a new social class, an unanticipated phenomenon in the Soviet Union, which was supposed to abolish social class.

This new social class arouses interest on several counts. As a group they are assumed

to have a vested interest in the growth of government, and are hence viewed critically by those who oppose the extension of governmental functions. There is a fear, too, that they will become a tool in the hands of a political party to maintain itself in power by favoritism. In the United States, employees of the federal government have had their organized political activities restricted.

These conditions of public employment resemble those in large corporations in that there is a hierarchy, and each person is working for someone else. Each is thus like a cog in a great machine.[16] These conditions are different from life in small businesses, where the distance to the top is not great, where relations are less impersonal, and where there are many entrepreneurs who are their own bosses. The conditions of employment in government differ from those of large corporations in that salaries are not so high for heads of governmental bureaus, though the pay in the lower ranks is often higher than for similar jobs in private industry. Because of this lower scale of pay at the top, at least in the United States, it is said that there is less incentive to make a career of government work. However, there is the incentive of some promotion, of reputation and of power, even if there is not the chance of getting rich. Governmental employees have greater security in their jobs. There is less firing and there are probably fewer discontinuances of ineffective bureaus than failures of businesses. Spokesmen for bureaucracy are neither as numerous nor as emphatic as are the critical commentators. Nevertheless, the prestige of career men in governmental service has been increasing. J. Edgar Hoover, the Chief of the U.S. Federal Bureau of Investigation — the F.B.I. — is a career man, and that the foreign service needs more career diplomats is commonly agreed.

More government employees are expected in the future from the projection of present trends; and if there is to be efficient government, their good work must be appreciated and honored.

[16] Cf. Roy G. Francis and Robert C. Stone, *Service and Procedure in a Bureaucracy* (Minneapolis: University of Minnesota Press, 1956). This is a case study of the U.S. Employment Service Bureau in Louisiana, testing theories advanced by Max Weber and Robert Merton that modern large-scale organizations foster the development of rigid rules, red tape, and impersonality.

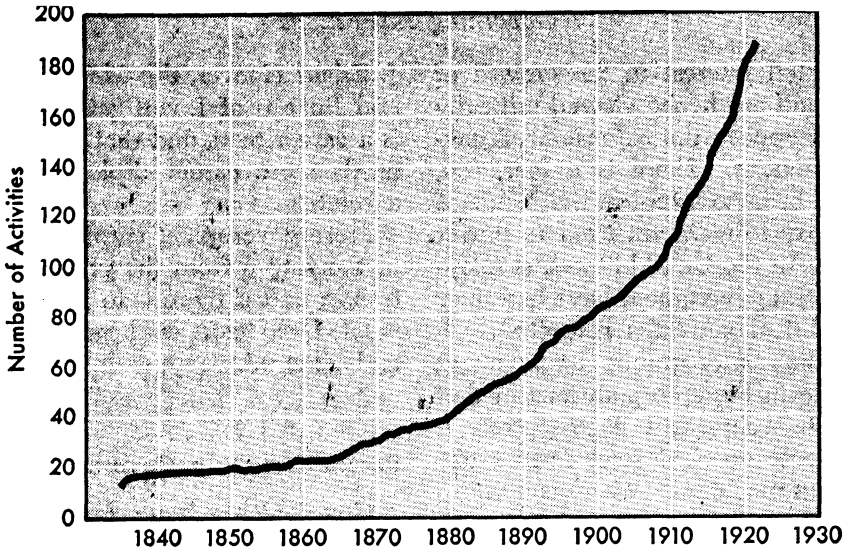
Recent Trends in Governmental Functions

Governments have been increasing the number of their functions rapidly in the past century and a half. A tabulation [17] of the growth of state functions in Minnesota shows the increase to be very rapid. There were 14 administrative units in 1858, and at subsequent ten-year intervals the numbers were 19, 36, 58, 91, 123, and 155 in 1918. Similar increases are noted in a study of Detroit.[18] These increases are not all additions of totally new functions, though there are new administrative units. These particular compilations have not been carried forward.

Since 1929, there have been no statistical studies of the growth of governmental functions in the United States. During the 1930's, a decade of unemployment, the multiplication of governmental activities was so great that the practice developed of abbreviating the titles of the commissions by using only the initials, as, for instance, the NRA for the National Industrial Recovery Authority, the WPA, the AAA, etc. There were some sixty-five such commissions authorized during this period. Following the depression came the

[17] M. B. Lambie, *Administration of the State of Minnesota* (Minneapolis: League of Minnesota Municipalities Publication, 1924), p. 6.

[18] L. D. Upson, *The Growth of a City* (Detroit: Detroit Bureau of Governmental Research, 1921). Some of the increases cited are apparent rather than real. The point is discussed by F. S. Chapin, *Cultural Change* (New York: The Century Company, 1928).



199 **Growth of Governmental Functions in Detroit**

Governmental functions are increasing rapidly. The above chart shows the actual numerical growth, which in general agrees with the measures of growth in terms of money spent. This growth of functions probably means an increase in taxation and is also an indication that the government has taken over functions formerly exercised by the family and other institutions. (Adapted from F. S. Chapin, *Cultural Change,* New York, The Century Company, 1928, p. 368. Based on data compiled by Upson.)

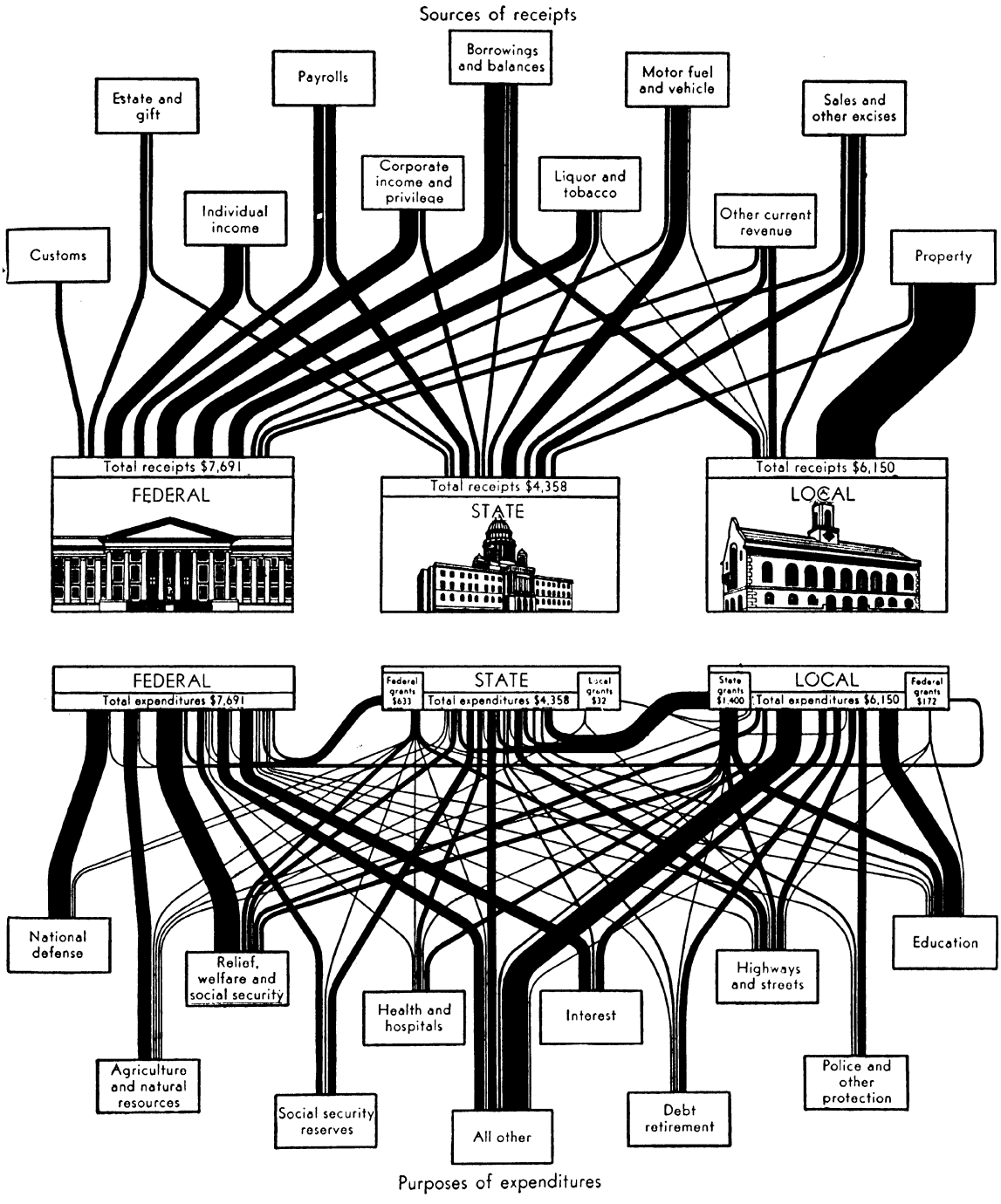
war, which produced the greatest proliferation of governmental activity yet known in this country. Since the war there has been a recession — though this is undoubtedly more in the nature of a fluctuation in the trend rather than a real reversal.

These new functions of government include a multitude of activities, which, however, may be thought of as of three kinds: social service, production, and war.

The social-service state. Most of the activities of government aside from "policing" are designed to serve citizens and the various institutions of society. Thus, agricultural price supports aid the farmer; a high tariff protects infant industries; old age insurance cares for the old people; and the regulation of money and credit is a help to everyone. The social services which the state may render seem almost infinite. Even though the principle of service by a friendly government be admitted, there is a question of how far to go and when to stop.

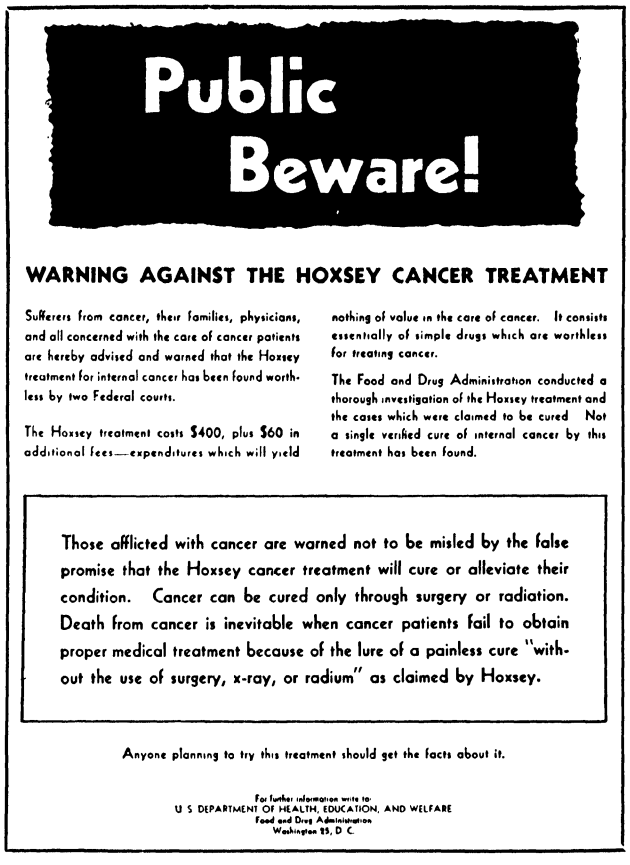
The social-service state not only aids the sick, the unemployed, the aged, and the destitute. The United States government also renders financial aid — often indirectly — to business. It aids American ship-owners in the building of ships, for example; a subsidy of approximately $40 million toward the total cost of $76.8 million was provided for the construction of the superliner *United States,* a private luxury ship that plies between the United States and Europe. It grants millions in mail subsidies to the airlines and the publishers of magazines and newspapers; in fiscal 1952 the Post Office Department deficit in favor of business mail was $670 million. In that same year, the federal government paid to veterans $4,710 million, and to farmers, for price supports, $184 million.[19] Economic and military aid to

[19] *Government Subsidy: Historical Review.* Printed for the use of the Committee on Agriculture. (Washington, D.C.: U.S. Government Printing Office, 1954).



200 How Governmental Revenue Is Obtained and Expended

This graph will be perplexing to the student. That is why it is included. For government is complex and this chart illustrates its complexity. It also suggests that government is Big Government, in an age of Big Business. (Courtesy of the Treasury Department, Washington, D.C.



Public Beware!

WARNING AGAINST THE HOXSEY CANCER TREATMENT

Sufferers from cancer, their families, physicians, and all concerned with the care of cancer patients are hereby advised and warned that the Hoxsey treatment for internal cancer has been found worthless by two Federal courts.

The Hoxsey treatment costs $400, plus $60 in additional fees—expenditures which will yield nothing of value in the care of cancer. It consists essentially of simple drugs which are worthless for treating cancer.

The Food and Drug Administration conducted a thorough investigation of the Hoxsey treatment and the cases which were claimed to be cured. Not a single verified cure of internal cancer by this treatment has been found.

Those afflicted with cancer are warned not to be misled by the false promise that the Hoxsey cancer treatment will cure or alleviate their condition. Cancer can be cured only through surgery or radiation. Death from cancer is inevitable when cancer patients fail to obtain proper medical treatment because of the lure of a painless cure "without the use of surgery, x-ray, or radium" as claimed by Hoxsey.

Anyone planning to try this treatment should get the facts about it.

For further information write to:
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Food and Drug Administration
Washington 25, D. C.

201 Government Increases Its Protective Functions

In earlier times, the family's share of responsibility for the protection of its members was relatively greater than it is now. But with industrialization, urbanization, and increased physical mobility, the protective functions have been transferred progressively to government, which now insures us against unemployment, destitution, loss of savings, dependence in widowhood and old age; and protects us against our enemies, both within the group and outside it, human and non-human. The poster on the left was mailed January 28, 1957, by the Post Office Department for display in 46,000 U.S. Post Offices and sub-stations throughout continental United States. "The poster is the first such advertisement ever issued by the Food and Drug Administration against a worthless remedy." (From the U.S. Department of Health, Education, and Welfare, Food and Drug Administration.)

foreign countries benefits American industries indirectly in that the aid is spent largely for goods produced in the United States.

There are those who argue that such extreme development will destroy self-reliance and make the beneficiaries dependent upon the state. To which others reply that the people should take advantage of their own organization to better their lot. Objection is raised that the poor, being more numerous, can vote to have any number of services rendered them, and then "soak the rich," who are fewer, for the payment. However valid these arguments may be, income and production are obvious limits to the growth of the social-service functions.

It should be observed that city governments were the first to develop these social services. When people live close together as they do in cities, it would not be wise to leave the disposal of garbage to individual families, or to permit each individual to say what is a fire hazard, or how to behave in case of a contagious illness in the family. From such aid the city proceeded to create playgrounds for children, to provide musical concerts, etc.

The production state. Socialists argue that governments should extend their functions to the production of economic goods. Governments have for a long time supplied water, owned and run railroads in some countries, or produced electricity as by the TVA in the United States. The operation of such essential enterprises as public utilities and coal-mining was undertaken in Britain. In Britain, it is difficult to say precisely whether governmental ownership of certain industries increased production per unit or not, because of the operation of other factors than that of government ownership. But certainly the effects of governmental ownership upon production were not unusually conspicuous. Recently there has been a return

of some industries to private ownership. In Russia governmental production extends to agriculture and to distribution, as well as to all major manufacturing. Others advocate that the government should only own or operate the big monopolistic business dealing in essentials or public utilities, leaving to private ownership the small business and the large competitive enterprises.

In countries largely agricultural but wishing to industrialize, there is the great problem of how to get the money to build the factories and transportation systems. Governmental ownership or governmental aid has the advantage of supplying capital oftentimes faster than will be supplied by private investment from outside.

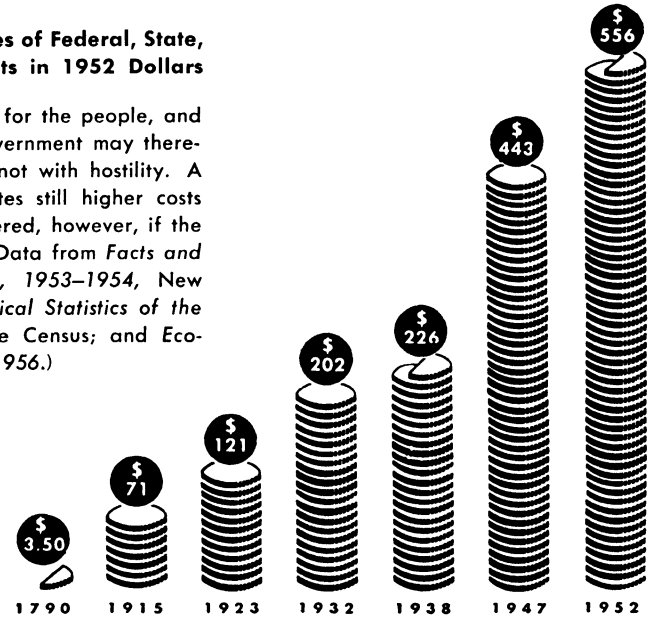
This question of the state in production is immeasurably important. It involves the merger of two of the greatest groups of modern organizations — governmental institutions and economic institutions — and affects the standard of living and the distribution of wealth and power. Quite important is the method of acquisition of the economic institutions, whether by purchase at a fair price or by appropriation from the owners without pay.

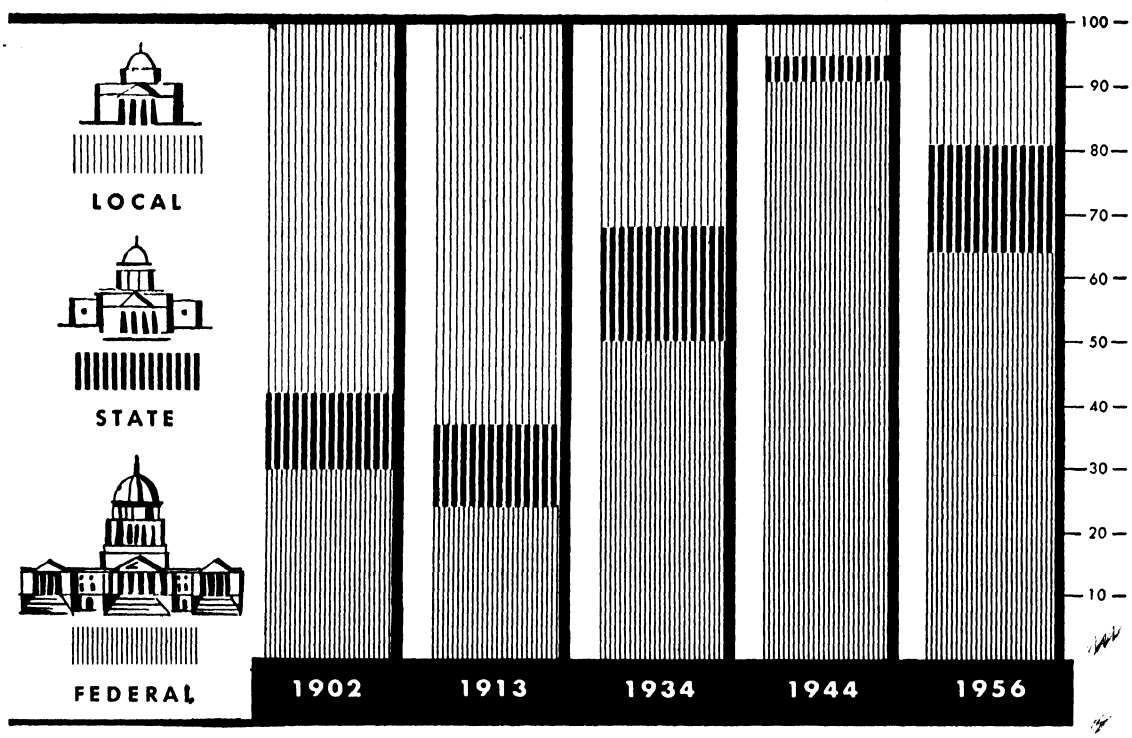
Also of great significance is how well the government will do this immense job of production on a large scale. Under private ownership and under the incentive of profits, production has been phenomenal; and enterprise in developing the new has been vigorous. In Russia government ownership has been carried on under unusual conditions, namely, under the stimulus of an ideology to which the leaders adhere with great zeal and also under the motive of self-preservation during wartime. The experience of such a bureaucracy over a long stretch of peacetime remains to be seen. There are, of course, values involved other than those of economics.

All over the world governments have had a reputation for inefficiency and even corruption. The national governments of Western Europe and of North America have perhaps been freest from the charge of corruption. But in the United States, hardly a big city has escaped the bad reputation for graft at some time in its history. There is also the question of inefficiency in government without corruption. When inefficiency in business brings the costs above the price, bank-

202 Per Capita Expenditures of Federal, State, and Local Governments in 1952 Dollars

Government does more and more for the people, and generally at a low price. The government may therefore be viewed as a friend and not with hostility. A projection of these figures indicates still higher costs in the future, which could be lowered, however, if the world would sign up for peace. (Data from *Facts and Figures on Government Finance, 1953–1954,* New York, The Tax Foundation; *Historical Statistics of the United States,* U.S. Bureau of the Census; and *Economic Report of the President, 1956.*)





203 **The Great Growth of Government in Washington**

The figure above shows the percentage of expenditures by federal, state, and local governments at five different periods in American history. The increased share of the federal government is due not only to the costs of war (notice the bar for 1944 — a war year) but also to the expansion of the social services at the national level. For this reason, the average citizen is learning to take more interest in the federal government. Formerly his chief interest was in local affairs. (Data from *Facts and Figures on Government Finance, 1956–57,* New York, The Tax Foundation.)

ruptcy results and thus the inefficient are removed. This safeguard does not exist in government. Nevertheless, corrupt and inefficient administrations have been succeeded by honest and efficient ones. Under the stimulus of war or faith in an ideology, governments have done excellent executive jobs. Also in some branches of government, efficiency is continuously at a high level.

The War State. In a great crisis like a war involving life and death, the state's functions in modern times cover nearly every activity of life. Few are the customs or institutions that are unaffected during a war in states as highly integrated as are the modern ones.

Noteworthy characteristics of a war state are three: a vast extension of the executive functions, action with speed, and unity.

The executives control or direct nearly all production since the equipment, disposition and maintenance of the military forces involve all the usual productive energy and more. The production in the United States increased phenomenally during the war years 1941–45, some 50 per cent as measured by the gross national product. In modern wars the expansion of the governments' administrative functions is enormous. Fortunately, during a war, the people and their industries are likely to support the war effort willingly, so there is little purposeful resistance.

At the same time, the pressure for speed is very great. In the United States in the year 1944, 96,359 aircraft were produced in one year. The pressure for speed is also on the legislature and the courts. In order to attain this speed, unity is a prerequisite, for dissension and pulling in different directions slow up action. A truce is called between labor and management in order to reduce the friction. So also political parties form coalitions, or else as in some countries a one-party system exists. Also in order to attain this unity and speed, governments must pay particular attention to all grievances, whether they concern the standard of living or race prejudice.

To attain these ends there is also a sacrifice of debate — often of elections in some countries — and of the rights to question and criticize. Furthermore information must be spread quickly to the people by radio and press. A war state cannot be run as a New England village is run by the town hall meeting.

During a modern, all-out war, government pervades social life far more extensively than was described in the opening paragraph of this chapter.

This pervasiveness of government continues to a certain extent during peacetime, if during peace, there is active preparation for war. War preparedness means a state ready for war and may be called a garrison state.[20] War preparedness has profound implications for democracy; for the great extension of the executive power of the government, as noted in the increasing burden of the presidency in the United States and the demand for speed and unity, implies some sacrifices of such democratic procedures as deliberation, debate, and popular control. Such sacrifices are acceptable in wartime, but are generally not thought needed in peacetime. And they are not, except in the garrison state. It looks as though the countries of the world may have to maintain garrison states for some time, a serious thought.

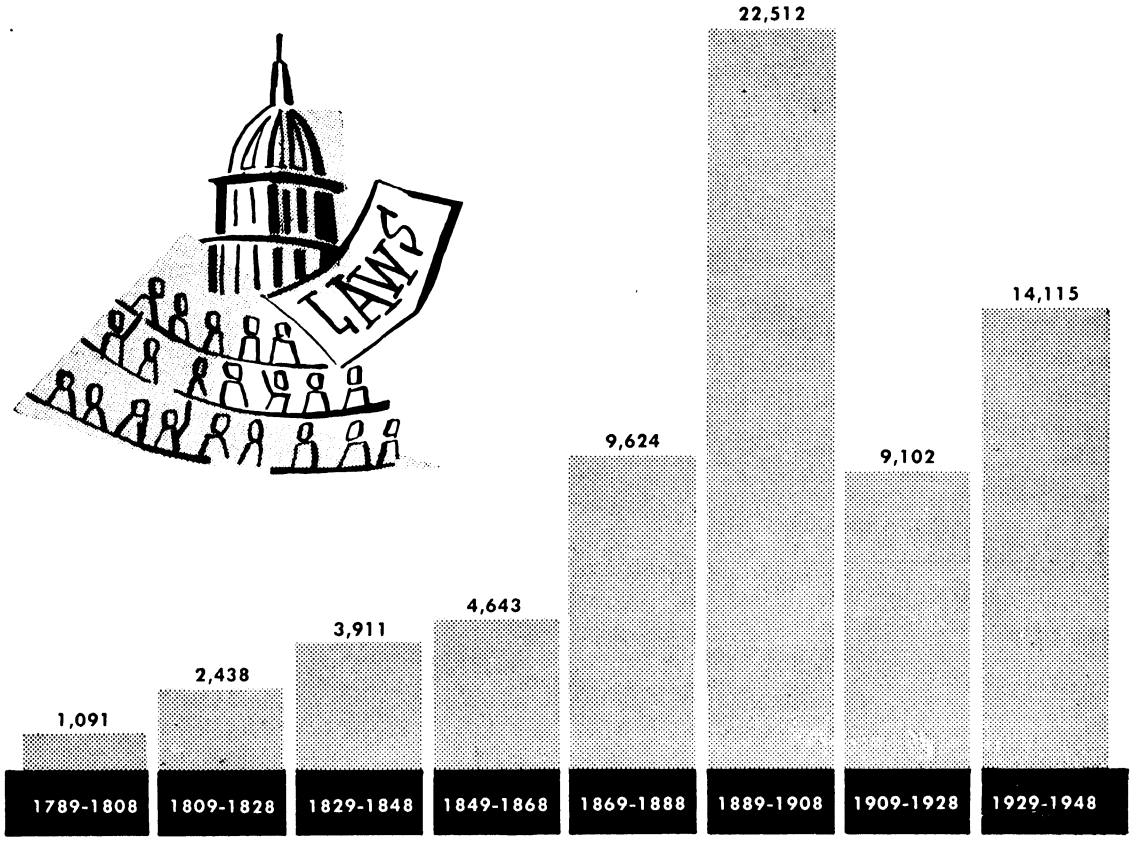
Government by Whom?

Who shall govern is important at all times. With the rise of democracy the government has tended to pass into the hands of the people. Indeed, the definition of democracy is government by the people. Voting and elections are often thought of as the evidences of democracy, whereas the socialists charge that voting is a sham unless there is a redistribution of economic power. Democracy superseded government by a class and by a hereditary family. The people are a great mass, too unwieldy to do the actual governing. So they elect periodically representatives who do govern directly, or appoint executives to govern or to administer laws.

Not all modern governments are elected periodically by the people, as for instance the government of Germany when the National Socialist Party was in power and the government of Italy when the Fascists ruled. When rulers continue to rule without subsequent election and without consulting the people, it is customary to call them dictators.[21] Since the problems of modern government are usually so extensive that they are beyond the competence of any one man, dictators have a group around them who exercise this dictatorial power. In this group the nominal dictator generally has the most power, but there is some distribution of power among the group. The power set-up of modern dictators resembles somewhat that of monarchs of several centuries ago, except that there is not the inheritance principle. Also the use of the mass communication inventions, such as radio and press, among

[20] An apt term used by H. D. Lasswell in an article called "The Garrison State," *American Journal of Sociology*, January 1941.

[21] For discussion of the dictator, see R. M. MacIver, *The Web of Government* (New York: The Macmillan Company, 1947), pp. 225–255.



204 Why Do We Need So Many Laws?

The number of laws enacted by Congress since 1789, by twenty-year periods. The marked increase for 1889–1908 was due mainly to the large number of pension bills which, beginning with 1908, were combined in a single omnibus pension bill. (Data supplied by The Library of Congress, Legislative Reference Service.)

literate peoples enables some public opinion to operate on dictators, perhaps more than on the monarchs of old.

Even in a democracy such as the United States, sometimes the will of the people is defeated by lobbyists, bosses of urban political machines, or by special interests such as those of railroads after the Civil War. Also newspapers owned by businessmen and supported by advertisers exercise great power over voters. The will of the people is unknown or more often ignored, perhaps, on such small issues as the treatment of the American Indian or on technical ones such as reorganizing the executive branch of the government, than on simple questions such as prohibition of the liquor traffic.

The right of the people to vote does not assure a government by all the people. In the first place not all persons vote. For instance, in the elections for the President of the United States in 1956, there were 102,700,000 persons old enough to vote. But only 62,000,000 voted. Some who were old enough to vote were not eligible because of residence and other requirements, and many of the others did not have sufficient interest in voting. The people are also handicapped in ruling because of the vast number of decisions that must be made by legislators and

by bureaucrats in conducting the large number of functions of government too vast to follow carefully or even at all. It is more difficult for the people to pass judgment on all these issues than would be the case where all the government did was to keep order. In 1953 alone, 50,000 statutes and regulations were passed in the United States.

It is not only the volume of governmental business that makes it difficult for the people to govern but also the rapidity of change. For this reason the people must be oriented rapidly and must reach an opinion quickly. Sometimes a rapid decision can be made, like the declaration of war after Pearl Harbor; but at other times, as in voting on compulsory health insurance for the whole country, a long period is required.

As the executive business of government expands and the demand for quick action increases, there is a great need for leadership and the use of the newer tools to aid in the democratic process — namely, the newspaper, the radio, telephone, telegraph, motion picture, television, and the public opinion poll — and to supplement the slower process of elections, town hall meetings, and deliberative assemblies. But leaders must be watched and checked at election times. If leaders are not watched, special power groups may exercise a leadership for selfish interest rather than for the public good — a step in the direction of dictatorship.

Some social trends in modern times, such as big government and rapid change, make governing difficult for democracies, and are an invitation to move toward rule without consulting the people, which we call dictatorship.

Some trends facilitate democracy. Such for instance are the rapid communication inventions. The public sample poll is also an invention of great potential usefulness in quickly familiarizing the leaders, both executives and legislators, with what the people think. The sample poll, being small, always has an error, but that error can be measured if the sampling is done scientifically, which is not always the case. But this social invention is in its infancy and may be expected to evolve. It shows up at times the ignorance of the people. For instance, 64 per cent of those who had not gone to high school did not know that the term in the House of Representatives is 2 years; 52 per cent of the farmers had never heard of the Marshall Plan after it had been discussed for six months; and as late as 1945, 59 per cent of the population would not say that they knew what TVA was.[22] Also a random sample of population is often not as good a source for determining public opinion on social issues as are certain organizations which generate and mold opinion, such as a chamber of commerce or a trade union congress.[23] The mistakes in prediction of presidential elections have been due not to the fault of the instrument but to its faulty use.[24]

SUMMARY

Although the act of governing others is a natural phenomenon, government as a social institution is not. Governing is involved in the domination of the inferior by the superior, and the weak by the strong, and occurs throughout the animal world. Government, however, refers to an organization which maintains order for the whole group. Such an organization is lacking not only among animals but also among peoples with the simplest material culture.

[22] Lindsay Rogers, *The Pollsters* (New York: Alfred A. Knopf, Inc., 1949).

[23] Herbert Blumer, "Public Opinion and Public Opinion Polling," *American Sociological Review,* 13: 547–549, October 1948.

[24] Philip Hauser, *Statement Before Congressional Committee on Public Opinion Polls,* U.S. Bureau of the Census; also, "Report of the Committee on Analysis of Pre-Election Polls and Forecasts," *Social Science Research Council Release,* December 27, 1948.

There is small need for a special institution of social control among primitive hunters, since there is little disorder among them. The routine of everyday living, elaborated and sustained by the folkways, makes for social regularity and stability. So, too, does the leadership supplied mainly by the older men. The groups are very small, which means that public opinion can operate effectively as a regulatory force. Disorders which do occur are handled by organizations such as the family, the clan, and the various associations, the primary functions of which are not governmental.

There is not a uniform development of government for all cultures. Hence it is not possible to trace the evolution of the state, except for a particular people. What may be shown, however, are the principal factors which are correlated with the development of government. Such are the presence of dominant personalities, war, surplus wealth to make war worth while, conquest, tribute, classes, and slavery.

Whereas early government was concerned with small, homogeneous, stationary societies, modern government involves a complex, rapidly changing society in a large area. This has resulted in an enormous expansion of the scope of the state, especially in its functions relating to social services, production, and war.

Democracy, favored by mass production, communication, and the growth of cities, is suited to slow deliberative action and is sorely beset by the complexity and instability of modern life. Although the power of the people in a democracy is always available as a check against abuse, still the situation is such that the interests of the people are often subordinated to those of party cliques and special pressure groups; and in times of crisis when speedy action is required, the democratic processes are suspended and are replaced by processes similar to those of the totalitarian state.

QUESTIONS FOR DISCUSSION

1. Why is there little need for government in the simpler societies?
2. What organizations maintain order, deal with crime, and enforce discipline among the lower hunting cultures?
3. Can we think of the state as a social invention? If so, how did it originate? What factors are favorable to the development of the state?
4. Is there a linear evolution of the state, with a series of stages common to all peoples? Elaborate.
5 What is the relationship between a high development of the property system and a feudal type of government?
6. How is the prevailing form of political leadership (hereditary or elective) tied in with the rest of the culture?
7. What factors made the cities birthplaces of democracy?
8. How is democracy in theory different from democracy in practice?
9. What features of our modern culture underlie the existence of the political machine? Could we get along without the political machine?
10. Discuss: "That government is best which governs least."
11. What is the relation of rapid social changes, such as are now occurring, to the need for formal governmental controls?
12. What effect does a serious crisis like war or economic depression have on government organization?
13. Does the state exist for the individual or the individual for the state?
14. What factors are responsible for the social-service state? The production state?
15. Can the garrison state be differentiated from the war state?

TOPICS FOR REPORTS

1. The social bases of political machines in American cities.
2. Means of social control in a particular preliterate society.
3. The feud as an illustration of the protective function of the family.
4. The clan as an agency of social control among preliterates.
5. Charles Beard's *An Economic Interpretation of the Constitution.*
6. Charismatic leadership.
7. Bureaucracy in the federal government of the United States.
8. Dictatorial power of government in democratic states during the Second World War.

SELECTED READINGS

BEARD, CHARLES, *American Government and Politics.* New York: The Macmillan Company, 1949.

Beard deals with the role of government in large dimensions and is broadly interpretive, as well as being a stimulating writer.

BEARD, CHARLES and MARY, *The Rise of American Civilization.* New York: The Macmillan Company, 1949.

While this book is a story of the development of American society, the part played by government is interwoven with the unfolding of our civilization.

BLAU, PETER M., *Bureaucracy in Modern Society.* New York: Random House, Inc., 1956.

Develops general propositions about bureaucratic structure and function based on case studies of private industry, unions, and political parties, as well as government.

LOWIE, ROBERT H., *The Origin of the State.* New York: Harcourt, Brace & Company, Inc., 1927.

An authoritative work on political origins. Perhaps the best discussion, with special reference to the role of men's societies.

MACIVER, R. M., *The Web of Government.* New York: The Macmillan Company, 1947.

See especially "From Family to State," pp. 31–39, and "Dictatorship," pp. 225–255.

SCHUMPETER, J. A., *Capitalism, Socialism and Democracy.* New York: Harper & Brothers, 1942.

The extension of the functions of government affects most phases of social life. The most controversial aspect of this trend is its effect upon democracy and capitalism. Schumpeter sets forth his ideas on these matters, ideas which are not accepted by all.

THOMAS, W. I., *Primitive Behavior.* New York: McGraw-Hill Book Company, Inc., 1937.

Chapter 14, "Primitive Government." An impressive collection of case materials. The interpretation minimizes the role of warfare in the development of the state. See also the author's *Source Book for Social Origins* (Boston: Badger, 1909), a standard work in social origins.

19

War and International Relations

The young reader will hear much more discussion of foreign affairs in his lifetime than did his parents or his grandparents. More newspaper space, more radio time, and more attention in Congress will be given to Russia, China, India, West Asia, Western Europe, the Arctic, South America, and the islands of the Pacific than formerly. The reason is that there will be more investment in these areas, more trade, more tourists, and more important matters for diplomacy. There will also be the threat of war and concern with international organizations.

It is also possible that the sons of the readers of this chapter will have to fight in another world war, and that some of the readers themselves or members of their families will be killed by bombs in their home cities. Even today the burden of war is heavy.

In the United States the net public debt of the federal government rose during the war period from 45 billion dollars in 1940 to 228 billion in 1953, or, expressed in another way, from 26 per cent of the total production in 1940 to 74 per cent of the production of 1953. In Europe and Asia the vastness of destruction in ruined cities is incalculable.

Sociology has a contribution to make to this problem; for international relations are the relations of groups, large political groups which we call nations or states. These relations vary from generation to generation and from century to century because culture changes. Culture and group are the subject matter of sociology. Then, too, war is a special illustration of conflict, and peace is a type of accommodation. Conflict and accommodation are general phenomena. The warrant for singling out war for special consideration is of course the immense social importance of this institution.

CONFLICT BETWEEN GROUPS

Let us begin with fundamentals. Basic to intergroup relations is the idea of contact. The Iroquois in 1400 could have no relations with the Ainu, for there were no contacts between America and Japan. But in the 1940's the United States can fight the Japanese on the other side of the earth because contacts are possible. Wars may now be worldwide.

The groups that made the wars of history were political groups having sovereignty over a definite area. In very early times warring groups may have been hunting bands, or villages, or enlarged families, identified with territory sometimes having vague boundaries. The general principles of intergroup conflict apply to all sovereign groups, regardless of size and degree of political development.

A further idea is that there is no common governing authority over independent political units in conflict. There is no single overall military force to keep order. Any law that governs the relationships between such independent political units is supported by

custom or agreement, rather than by power.

Another observation is that though wars differ, all wars are organized fighting sanctioned by the authority of the group. Whether they be civil wars, raids, feuds, attacks by guerrilla bands, by pirates, or by segments of the group, they are called wars if the fighting is organized and sanctioned.

The nature of wars is affected by the size of the groups and by the integration of its units. When small bands of Crow Indians fought the small bands of the Dakota, necessarily the organized effort was different from that when Germany fought France. When states are loosely integrated, small segments of one state may fight small segments of another.

A final concept is that both wars and states evolve. The fighting of a small war party of Murngin with stone implements over stolen women is simple and crude indeed, as compared with the later wars of the United States, which were fought in the air, on land, on sea, and under the sea. In the future, wars may utilize gas, bacteria, plant hormones, and radiation, as well as explosives.

THE BIOLOGICAL BASIS FOR WAR

Must we always have war because of our biological nature? Fighting is extensive among the higher vertebrates, herbivorous as well as carnivorous: moose, sheep, goats,

205 What We Could Do with Money Spent on War

The amount of money spent in one day in 1954 by the federal government of the United States on wars past and present would construct and endow the plants of another Amherst College, another Bennington, another Bowdoin, another Bryn Mawr, another Bucknell, another Carleton, another Coe, another Colorado College, another Occidental, another Ohio Wesleyan, another Reed, another Rollins, another Sarah Lawrence, another Scripps, and another Swarthmore. Think what could be done with a month's expenditure, or even a week's. This money, of course, would not build the spirit of these colleges. There are some things that money cannot buy. (Data on finances of colleges are from the American Council on Education and from the colleges in 1955; those on the cost of war are from the *U.S. Statistical Abstract.*)



horses, wolves, and man's distant biological relatives, the monkeys and apes, all fight. May not war therefore be rooted in our animal inheritance, and hence be inevitable? No less keen an observer than Freud remarked that war resulted from man's innate destructiveness, and Darwin saw in war a natural response on the part of the group whose survival is endangered.

The view of war as an expression of the biological nature of man is to be considered in the light of the discussions of Chapters 3 and 10 where we learned that man is not imperiously governed by instinct as are the insects and lower vertebrates, but has a biological nature that is flexible, hence readily molded by culture.

It must be remembered that we are discussing war and not fighting between individuals. True, some ants carry on organized fighting on a large scale against other ants, who may be captured and held as slaves. But this war of ants is instinctive, periodic, and not learned or passed on by tradition. In man, even individual fighting is not determined by instinct since a person may learn not to fight.

If wars were determined by our biological inheritance, then one might expect that all peoples would have war; but there are several peoples who have never been known to have a war. The Greenland Eskimos, for instance, are familiar with murder, and experience anger and hate; but when Rasmussen tried to explain to them that the countries from which he came engaged in warfare, the Eskimos were baffled and could not understand why one community would want to exterminate another.

Furthermore, though wars may be frequent among nations, they do not occur periodically as do rhythms of hunger and sex. Sweden was at one time in nearly continuous war, but she has not engaged in a war since 1815. The biological nature of the Swedes could not have changed in that period.

To be sure, man has a biological nature which makes human warfare possible; but it does not make warfare inevitable. Man is capable of becoming belligerent, and when frustrated may show aggression. If he lacked this trait, perhaps there could be no such behavior as war. But human war is not a simple manifestation of animal anger. Indeed, in modern times nations must resort to conscription to get an adequate army. In World War II the closer the American soldiers got to the enemy lines, the less personal hostility they felt toward the fighters on the other side.[1] Perhaps in human beings, the "gregarious instinctive tendencies" are as important for warfare as is a "pugnacious instinctive tendency."

We conclude that war, which is intermittent in human societies, is not explained by inherited biological nature, which is a constant from one nation to another and from one century to another. Biology does not tell us why we went to war against Germany in the twentieth century and not in the nineteenth, or why we fought Germany and not France.

The best approach to the study of war is to seek an explanation in terms of culture, and in that particular part of culture which concerns the relations of groups, i.e., political units, one with another. War is to be seen as a special aspect of "international relations."

EARLY WARFARE

Among primitive peoples. Our inferences about early wars, before written history, are drawn from what we know about wars among preliterate peoples in relatively recent times. Before considering primitive warfare, the reader will do well to remember that there are from 500 to 1,000 different pre-

[1] Samuel A. Stouffer *et al., The American Soldier,* Vol. II (Princeton, N.J.: Princeton University Press, 1949), Chapter 3.

literate peoples — according to one's definition of the term *people* — and that their conditions of life differ greatly. But this heterogeneous multitude of people is homogeneous in certain regards such as illiteracy, small size of communities, and simple implements of stone and metal. It is for this reason that when we compare them with modern societies we are sometimes justified in lumping primitive peoples together.

It is also useful to recall the preliterate hierarchy of lower hunters, higher hunters, herders, agriculturalists using a hoe, and agriculturalists with plows, since the development of groups has some correlation with these classifications of material cultures.

We would expect primitive warfare to be crude, since this is the usual initial condition of a new invention or social organization.[2] For instance, the war parties are small, 10 to 50 men, 100 being exceptionally large.[3] Only a few peoples such as the Ashanti of Africa — a rather warlike continent — maintain armies.[4] As to the frequency of wars among primitive peoples, it is not possible to give a measure. In A. L. Kroeber's *Anthropology* the word war does not occur in the index nor as a heading of a paragraph or section. Yet nearly all primitive peoples have had some experience with group fighting, though the Veddahs of Ceylon and a dozen or so others are reported not to engage in wars.[5] Wars among the simpler peoples often are caused by intruders from territory where resources are scarce. Such wars are rather like raids and involve surprise attacks; since reprisals may continue back and forth, they also suggest feuds.

The foregoing remarks serve only as the briefest introductory comment on primitive wars, for we do not wish to tarry over primitive warfare longer than to learn what lessons it may have for us or to see what characteristics appear to be common to war in general.

Traits of primitive warfare found in modern wars. The first characteristic of the interrelations of "states" in early times is a suspicion of outsiders. Attitudes of hostility toward outsiders are common to primitive groups who all have a strong "we" feeling, whether it be called patriotism or not. The brotherhood-of-man doctrine does not generally extend beyond one's own people.

A second characteristic is that glory is an accompaniment of primitive wars. The brave warrior is accorded great honor; and much group prestige results from successful raids. Since small communities with little property esteem name and reputation greatly, the glory to be gained in war may serve to encourage warfare, offset no doubt by hazard and hardship.

Religion is tied closely to primitive warfare.[6] The aid of religious beings is sought with a good deal of ceremonialism. "God is on our side," but his active help is sought. Among primitives, apparently, religious sanctions are not required for the moral justification of war.

Contacts are a necessary basis in determining who fights whom. Thinly scattered peoples are in general said to be less warlike than those who live close together in densely settled areas,[7] though there are exceptions in the case of a very weak people living in contact with a very strong one.

Retaliatory wars are mentioned frequently in the literature. These raids occur intermittently but they may continue through the

[2] Among some lower hunters, religious organization and marriage systems are far from crude, but probably among them religion is far advanced, even though their material culture is simple.

[3] Harry Hoijer, *The Causes of Primitive Warfare* (Unpublished master's thesis, University of Chicago, 1929), p. 2.

[4] Melville J. Herskovits, *Man and His Works* (New York: Alfred A. Knopf, Inc., 1948), p. 344.

[5] Maurice R. Davie, *The Evolution of War* (New Haven, Conn.: Yale University Press, 1929), Chapter 4.

[6] *Ibid.*, Chapter 7.

[7] Harry Hoijer, *op cit.*, p. 109.



206 Mother's Day

The drawing was made by the famous cartoonist John McCutcheon after Rodin's "The Thinker." Since war is generally glorified and dramatized by the group, young children are greatly influenced, and the war pattern perpetuated. Originally published in *The Chicago Tribune* on Mother's Day, 1942, during World War II. (Courtesy of *The Chicago Tribune*.)

years between ancient enemies. It is as though the attacks recur through their own momentum, each group trying to add to its glory and to wipe out humiliation.

The features of the war pattern of primitive peoples which have been described above are found in all stages of culture.[8]

[8] These observations are drawn in large part from the analyses of Hoijer and Davie, in the books cited; from the writings of Robert Lowie on the Crow Indians; and from Quincy Wright, *A Study of War* (Chicago: The University of Chicago Press, 1942); as well as from various monographs on preliterate peoples.

WAR IN HISTORY

The conditions of warfare at the beginnings of history. Developments in transportation lead to contacts between groups,

and group contacts lead to friction. About the time writing was developed, which signalized the beginning of history, there were several significant developments in transportation, involving the boat, the horse, and the pack animal. The range of contacts of peoples was greatly extended, especially along rivers and coasts, and over plains and semi-deserts. Friction often was the result. Significant also is the fact that both the horse and the boat were effective instruments in war, for horses and warships permitted surprise killings and quick escapes. Shortly afterwards iron and steel were put to war uses also.

Contemporaneous agricultural development made larger populations possible, especially along the waterways where the advantages of trade and division of labor increased the local food supply. The developing inventions meant more property which may have served as a stimulus to war. So the arena was set for wars, with property as booty, with additional land to be had, with the range of contacts increased by transportation inventions, and with differentials in the weapons of war and in the size of populations. And wars there were.

Early cities felt the need of protecting the sources of their food supply and of guarding the routes of transportation, and accordingly maintained armed forces.

The amount of war. Professor Sorokin has counted 967 major interstate wars in the history of Greece, Rome, and certain European countries from 500 B.C. to 1925 A.D.[9] These countries engaged in some war in each of about 50 per cent of the years. But less than one-half of the total number of years was spent in war since many wars lasted less than a full year. Since 1750 the United States has been involved in 12 wars, and has also engaged in more than 170 distinct military campaigns.[10]

The record of most countries contains many wars: in Austria, in 40 per cent of the years of her history there were wars; in Britain, 56; in France, 50; in Germany, 28; in Italy, 36; in the Netherlands, 44; in Poland and Lithuania, 58; in Russia, 46; and in Spain, 67.[11] Probably the peoples in these countries consider themselves peace-loving and think that they fought for defense or for justice, and that their enemies were aggressors. The above statistics do not tell us who were the righteous and who were the wicked.

WAR AND THE GROWTH OF STATES

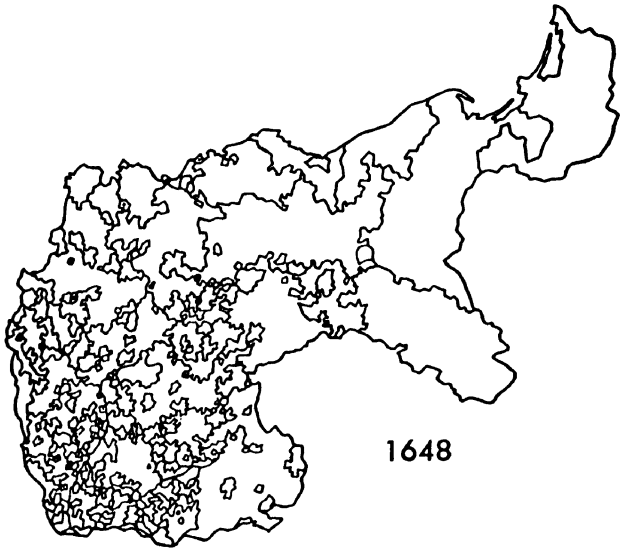
States are getting larger and fewer. The evolution of states has been toward an increase in size. At the dawn of history, independent political units with control over a given area were, for the whole world, to be measured by the thousands if not by the tens of thousands. In 1957 the United Nations had a membership of 82. The total territory of the earth remains the same. So the states are growing larger.

This process has depended upon the evolution of the transportation inventions. A state which depends upon human legs for its transportation must necessarily be small. With the horse, the automobile, or the railroad, the state may be larger. But the influence of the transportation inventions on the size of states is neither immediate nor simple. Obviously, an increase of 10 per cent in the speed of railroad locomotives in a nation

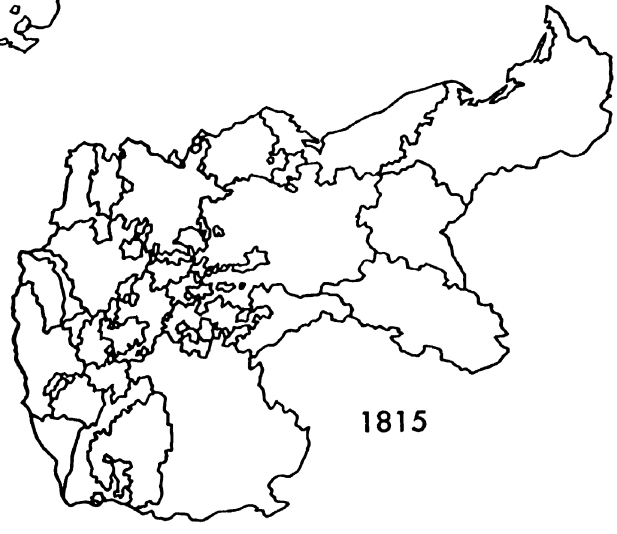
[9] P. A. Sorokin, *Social and Cultural Dynamics*, Vol. III, "Fluctuations of Social Relationships: War and Revolution" (New York: American Book Company, 1937), p. 283.

[10] Quincy Wright, *op. cit.*, Vol. I, pp. 636, 650, 655. War is defined as all hostilities recognized as states of war in the legal sense, or which involve more than 50,000 troops. Some lesser occasions not recognized as legal war are included if they lead to important changes, such as territorial transfers.

[11] Sorokin, *op. cit.*, p. 352.



The maps show the same territory at three different times. This Germanic land in 1648 had 330 different independent states (so many that it is not possible to include all of the city states in a small map). In 1815 there were 36; and in 1871 only one.





States have been growing in size throughout history, with an occasional reversal. Will the process continue until there is just one state for the whole earth? If so, when? And would there be no war, or only civil wars?

does not bring an immediate increase of 10 per cent in its size. To enlarge a state requires effort, especially in overcoming resistances from outside, and takes time, often centuries. That the correlation between size of states and transportation inventions is not close is shown by the fact that both little Switzerland and big Russia have automobiles and railroads. We can say, though, that certain transportation facilities make larger states possible.

Conquest precedes expansion. Given transportation inventions, how do states become larger? First we note that not every state can become larger, not if the whole land of the earth is filled with states. There must then be some consolidation of states. Sweden, which with automobiles and railroads has the same size now as it had without them, cannot increase its area without depriving Norway, Finland, Denmark, or some other country of territory. If Norway, Finland, or Denmark do not consent, the alternative for an enlargement of Sweden is conquest.

Sometimes states have been united by marriage of their rulers. Occasionally states have agreed to lose their identity in a larger state with a new name, as was the case with the thirteen British colonies along the Atlantic seaboard of America. But even in the union of territory by marriage of rulers or by consent, the purpose may be to gain more military strength either for offensive or defensive operations. Larger unions have often resulted from several states consolidating against a common foe. Thus wars helped to unite separate states into the United States and separate states into modern Germany.

The transportation inventions favor military conquest. They transport military forces and supplies, and in the case of the boat and the horse, even become actual military weapons — a navy and cavalry. With these may go differentials in new weapons, in metals and explosives, and in population increases because of new agricultural inventions and favored trading positions. These differentials mean that one country becomes much more powerful than a neighbor, whose weakness invites attack. Thus England conquered American Indians, Australian natives, and the peoples of India.

Assimilation follows. In the extension of political authority over a larger territory, the forces of conquest precede the forces of assimilation. The forces of conquest rest upon military inventions while the forces of assimilation rest upon the communication and transportation inventions such as language, roads, printing presses, etc. Thus the Burgundians were conquered but not assimilated for a long time after their conquest, as shown by their insurrections, and the Irish were never assimilated by the English.

Empires are illustrations of the control which the military inventions have enabled one political authority to extend over a range of very heterogeneous peoples. Such were the Roman Empire and the British Empire. But empires cannot hold together, as the people in a village do, for there are not enough contacts in the conquered area to establish the similarities of language, custom, and law, nor are there the economic interests which make for the solidarity discussed so much by French sociologists. So, too, in areas not extensive enough to be called empires, there may be insurrections for centuries before assimilation removes the probability of civil war. Even in the United States of America where language was the same everywhere and the customs were much the same, the economic heterogeneity almost led in the 1860's to a split of the state into two parts.

WAR AND STRONG GOVERNMENT

The second great social effect of war is the part it has played in strengthening government and extending its influence. The

growth of government owes much to war.

When there was little formal government, order and control were maintained on the one hand by family and kinship and on the other, in the small communities of the time, by the group pressure described in Chapter 18. To consolidate the separatism and individualism of great families and of small communities, an over-all government was needed. This government required authoritarian leadership and experience in effective formal control.

War leaders became governmental leaders and marshalling armies gave collective experience beyond the family, farm, and village. When conquest occurred, the administration of defeated peoples and the handling of insurrections afforded administrative experience, as did the collection of revenues. In the twentieth century war still strengthens the federal government in its struggle not with powerful families or lords nor with walled towns, but with the individualism and *laissez-faire* attitudes of powerful industries.

Without war. It would be interesting to speculate whether, if there had never been war, there would have been a growth of states in size and a growth of government. Or if war were abolished, would states cease to grow in size and governments cease to grow in power?

We observe that, with the contact inventions and without war, small localisms with distinguishing features would tend to disappear and areas with the same culture would become larger. Whether this process of diffusion would be slower without wars than with them, we do not know. On the other hand the growth of political units might have been much slower, for political boundary lines are slow to change. Wars have been the most common method of eliminating them.

The growth of government might well have been slower without war; but with an increase in the size of communities and the growth of population in general and with economic enterprises too large for family control, government would have developed.

It seems clear, however, that war has speeded the evolution of states in size — though possibly not the culture areas — and has aided greatly the development of government.

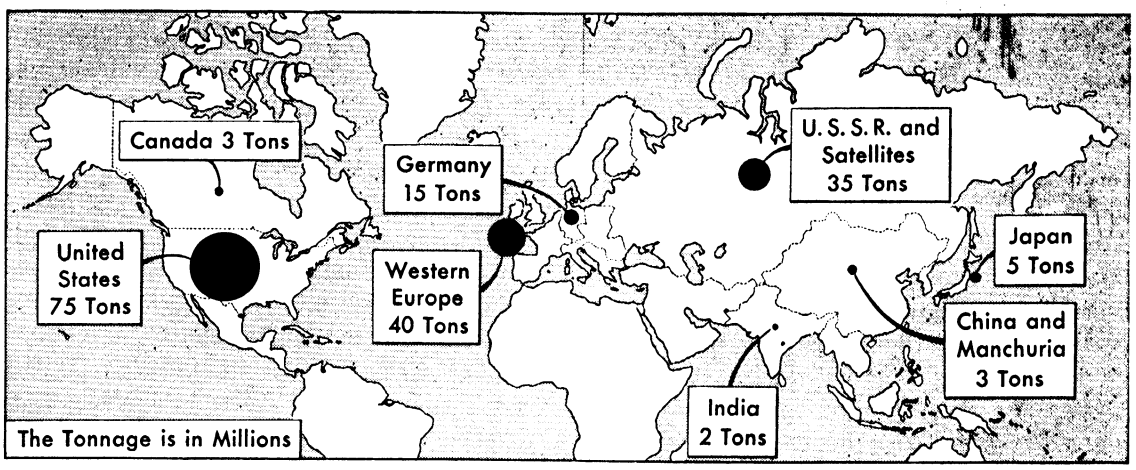
THE POWERS

The ranking of powers. The differentials in the size of populations and also in the possession of inventions, particularly transportation and war weapons, mean that nations vary greatly in power. Through much of history, power was equated with population. But today mere numbers do not make a great power. The possession of the atomic bomb adds to the power of the U.S. and U.S.S.R. and expanding population adds to the power of both. Where there are wars and military traditions, it is customary to measure greatness in terms of military power, not in terms of literature, philosophy, music, and art. So nations and states are spoken of as powers.[12]

Military might being what it is in a warlike world, the ranking of powers becomes a matter of the greatest international importance. The facts of international life rank the powers with as much precision as the facts of barnyard life determine the pecking order of chickens, described in Chapter 7. At different times, Egypt, Persia, Rome, France, and Britain have been first in the power order.

Power is not only effective in the crucial test of war, but also between wars. Even

[12] The point is worth noting, for many who are most vocal in plans to "abolish" war are often moved by the bias of hope, which may rest upon an appeal to reasonableness. But any realistic program to prevent wars must be discussed in terms of power. For it is power that makes wars, and to prevent them one must reckon with power.



208 The Powers and Blast Furnace Production

The blast furnace (like the kilowatt hour) is a symbol of a country's power and standard of living. This map shows, not the number of furnaces, but their peak production of pig iron from 1929 to 1948. Data on pig iron are not readily available for the mid-1950's. Indexes of steel production, 1955 (USA = 100) are Canada 4, Western Germany 20, Western Europe 45, U.S.S.R. and satellites 53, Japan 9, India 2. The ratios of pig iron to steel production vary little.

This map throws light on the ranking of the military powers, and on why certain countries are no longer great powers as compared with the United States and Russia. Germany is shown as powerful either alone or in alliance. The data are useful for the past two decades, but in the more distant future, the U.S.S.R., China, and India will have more power, as indicated in Table 34. There are few blast furnaces in the southern hemisphere, though South Africa has the resources to support them. (Data from *Statistical Yearbook, 1946,* Pt. 2, British Iron and Steel Federation, 1948; *Statistical Abstract of the United States,* 1957, p. 949.)

when there is no war there are stakes of diplomacy to be played for. Back of this diplomacy, however, are power and the possible threat of its use, sometimes called a "cold war." There is no over-all authority to administer international law, and in practice the international courts do not handle power problems. So power counts in many decisions of peacetime regarding international cooperation, investment, trade, options, access to raw materials, etc. It is often more profitable for lesser nations to line up with a likely winner in a war, rather than with a loser.

The ranking of powers changes from time to time. In the late nineteenth century there were eight great powers, six of them European: Britain, Germany, France, Austria-Hungary, Russia, Italy, the United States, and Japan. By the middle of the twentieth century, the United States and Russia have stepped out in front so far that they are called super-powers.[13] The collection of states known as the British Commonwealth may also be called a super-power. The strictly European powers are now much farther below the top rank.

Shifts in power. Why does the ranking of power change? Since power is in large part a function of economic and military inventions, of population, and of location, we naturally look for answers in these factors. Because location is a constant, we cannot use it to explain the variable of changing rank. Economic organization and inventions change more quickly and with a

[13] William T. R. Fox, *The Super-Powers* (New York: Harcourt, Brace & Co., Inc., 1944).

greater swing than population. Thus Britain's rise to power was aided greatly by the boat and the Industrial Revolution. Until the coming of the railroad, the most highly developed political economy was maritime.[14] About the thirteenth or fourteenth century, boats were sufficiently evolved to sail into the wind and get far away from the coast. New continents and lands with new wealth were discovered. The British had always been a sea-going people, as were the Athenians. But with bigger boats, the British went further than the Athenians who were limited largely to the Mediterranean. To maintain this position as a seapower, the British had to fight the Dutch, the Spanish, and the French.

With the Industrial Revolution came the iron-hulled steamboat[15] and also the means for manufacturing the various implements and needs of war. A great differential in power accrued to the British because in the nineteenth century no other state had developed the manufacture of steel to the extent that the British had. The nineteenth century, however, was a relatively peaceful century, after the Napoleonic wars ended in 1815.[16] It has been said that Britain maintained the peace, probably because few nations with needs or grievances were able to challenge her power.

Inventions have a way of spreading from one area to another, as was the case with the pipe and cigarette, with coffee-drinking, with contraceptives, with railroads, with automobiles, and with airplanes. The blast furnace is no exception, except that its spread is limited to countries with coking coal. In time, England lost her primacy in steel-making, for the practice spread to the United States, to Germany, to Japan, to Russia, to Belgium, and France. It is spreading now to China and India. With the Industrial Revolution came the railroad and the development of a vast amount of land trade. Thus the power differential of the states with a maritime economy was reduced.

In the United States the reaction to the blast furnace appears not to have developed aggression either during the nineteenth century or up to the present in the twentieth century. The United States had room for its growing population, an abundance and variety of raw materials, and no serious grievances against Britain.

The Industrial Revolution made Germany, which had coal in the Ruhr and iron in Lorraine, stronger from year to year. By 1914[17] her population was nearly as large (85 per cent) as that of France and Britain combined, and her steel production was twice as large as Britain's.

Japan was also acquiring blast furnaces; but she needed more raw materials and a place for her already overcrowded island population. The coal and iron on the mainland in Manchuria would probably make that region a center of power, if not under Japan's control, then under China's or Russia's, which would cause Japan concern. The many opportunities and perhaps some insecurity influenced Japan to attempt to direct or control the industrialization of China. Victory in the World Wars would have advanced Japan, and Germany, in the ranking of powers.

The use of coal and the manufacture of steel spread beyond Germany into Russia as well as into Japan and the United States. The industrialization of the Soviet Union proceeded under successive five-year plans

[14] A. P. Usher, "The Steam and Steel Complex," in William F. Ogburn (ed.), *Technology and International Relations* (Chicago: The University of Chicago Press, 1949), pp. 59, 60; William H. Dean, *The Theory of the Geographic Location of Economic Activities* (Cambridge, Mass.: Harvard University Press, 1938).

[15] Bernard Brodie, *Sea Power in the Machine Age* (Princeton, N.J.: Princeton University Press, 1941).

[16] Sorokin, *op. cit.*, Part II.

[17] Witt Bowden, Michael Karpovich, and A. P. Usher, *An Economic History of Europe Since 1750* (New York: American Book Company, 1937).

which stressed the heavy industries, namely, those using large quantities of steel. Russia's production of steel in the middle 1930's was greater than Britain's, and three-quarters that of Germany, but only 35 per cent that of the United States.[18] After World War II had weakened the strictly European powers, the Soviet Union stood out as a very great world power. This was due in part to her large land armies, and also to her promise of industrialization and a large population of perhaps 300 million in a few decades.

Today the U.S.A. and the U.S.S.R. are in the top rank as world powers with the smaller European countries on a different plane of power. This shift in the ranking of powers is due to new differentials in population and in the use of coal and steel, as indicated in Tables 33 and 34.

If Germany had won in World War II, Europe might have been much more closely integrated. A united Europe around an industrial Germany at its center would have been a very significant power. Later, China and India will appear in the ranking of powers as the Industrial Revolution spreads to them, because they possess large areas, large populations, and great resources of coal and iron.

Uranium may be added as a source of energy for those areas without coal, or be added to the supply of countries with coal — one pound of uranium yielding 10,200,000 kwh of energy compared to 3.5 for a pound of coal. But uranium — the geographical distribution of which in exact amounts is not published — is not a substitute for coke. An economical method of making pig iron or steel from iron ore without using coke might advance Brazil among the powers, for Brazil has iron, water power, and a large area with a high birth rate.

[18] *Ibid.*, pp. 389, 772.

Table 33 · Approximate Population of Powers, in Millions, About 1700 and 1953*

Country	1700	Country	1953
United Kingdom	8.6	U.S.S.R. . . .	207
France . . .	23.6	U.S.A.	160
Spain	7.2	United Kingdom	51
Prussia . . .	5.1	France . . .	43
Holland . . .	1.1	Germany . .	70
Sweden . . .	1.6	Japan . . .	87
Italy (six states)	9.2	India	372
		China	602

*Data from Bowden, Karpovich, and Usher, *An Economic History of Europe Since 1750* (New York: American Book Company, 1937), and from the *Population Index*. Population of China from census of 1953, as reported in the *World Almanac*, 1957.

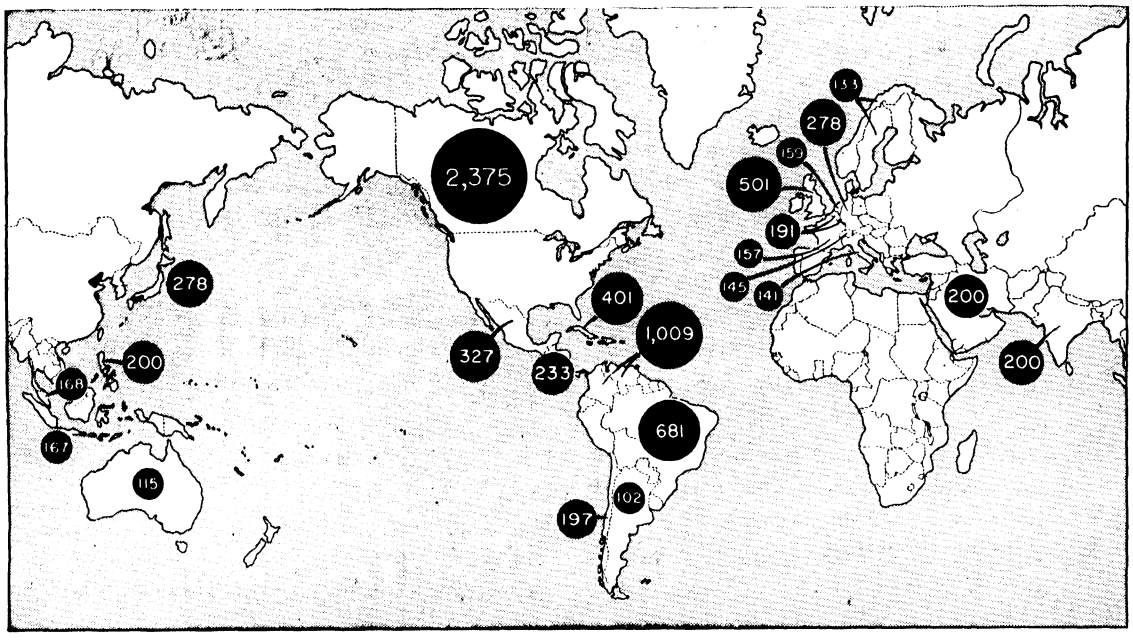
Table 34 · Mechanical Energy of Powers*

Country	Total Inanimate Energy Consumed in 1950, in Millions of Metric Tons of Coal	Total Probable Resources of Coal, in Billions of Metric Tons
United States .	1,314	2,880
U.S.S.R. . . .	200	1,200
United Kingdom	245	172
West Germany	139	337
France . . .	101	6
China	37	1,012
India	43	65
Japan (proper)	69	10

*Data from United Nations, *Statistical Yearbook*, 1951; World Power Conference, *Statistical Yearbook*, No. 4. The data for China and India are highly controversial.

NATIONAL INTERESTS

The states of the world may be viewed as a great social system (but without a common government) in which the parts — that is, the different states or nations — are interacting one with another. Such are international relations. The formal structures of these relations are the international bodies such as the United Nations, the International Labor Organization, The International Court of Justice, the International Monetary Fund, on which various nations have representa-



209 United States Imports, 1954, in Millions of Dollars

If each nation had to depend solely on the materials found or produced within its boundaries, the level of living would fall to dismal depths, especially for small countries. Interference with the trade of the United States preceded the American Revolutionary War, the War of 1812, and the entrance of the United States into World War I. (*Statistical Abstract of the United States*, 1955, p. 913.)

tion, or to which they make contributions. In addition, there is the structure consisting of ambassadors, ministers, consuls, and delegates.

The functional relations of these states one to another are best seen in terms of national interests. Obviously a nation has many interests that relate to other nations. Perhaps first is avoidance of attack, or defense against military aggressions. Such interests may lead to alliances. But often throughout history, nations have profited by conquest and the acquisition of territory, as was especially the case of European nations after the discovery of America.

A nation needs materials from other countries. There are national interests other than those of military conquest or defense. Important are those of an economic nature, such as trade and investment. These are of great importance for several reasons. First is the great demand for different kinds of materials not produced in the home country, like oil, nickel, cotton, sulfur, and the desire of individual consumers for such goods as coffee, spice, silk, jewels. Specialization in these products arises in part because of variations in climate and in the earth's surface. Extensive trade is made possible by the network of modern transportation.

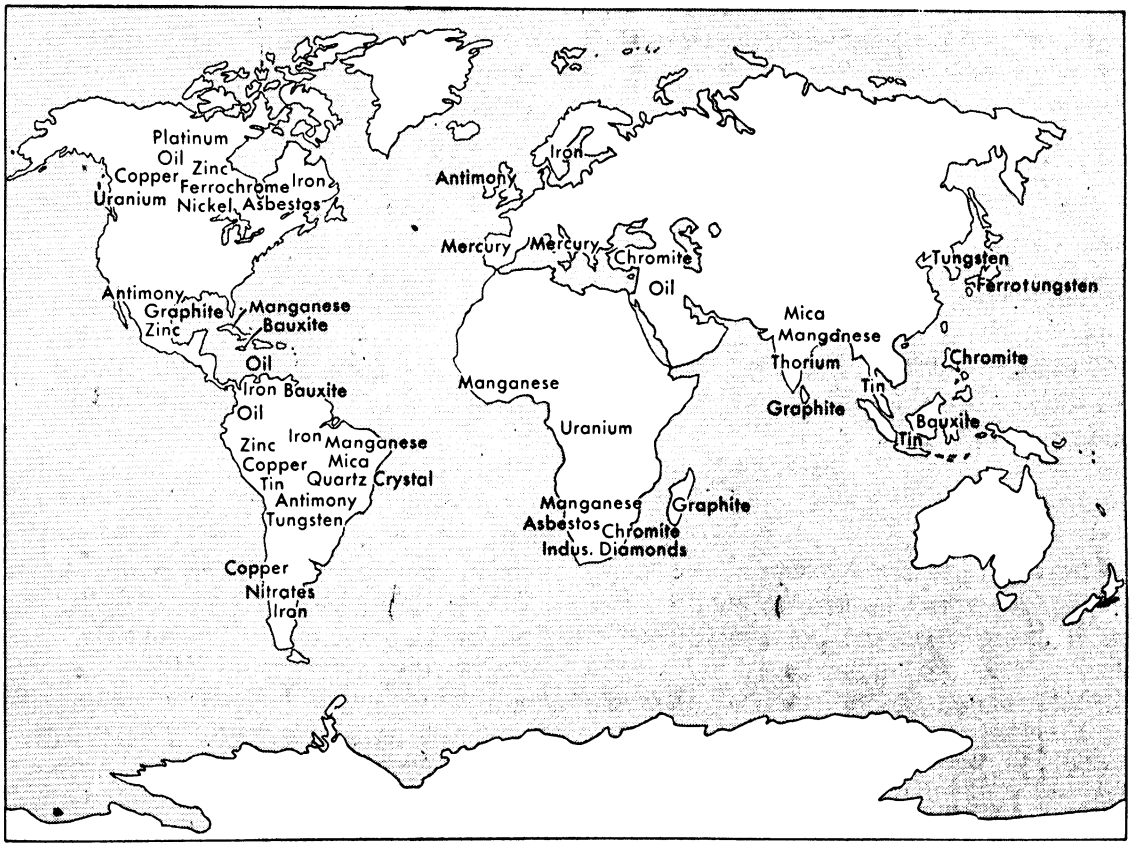
Young readers who have not traveled outside the United States do not realize the importance of trade to the many small states which do not have such extensive natural resources as exist in the United States. Guatemala, for instance, has to import nearly

all of the products of modern factories that it uses: watches, fountain pens, radios, automobiles, books, paper, fabrics, shoes, agricultural implements, plumbing equipment. This it can do by paying for them from the sales of bananas and coffee to other countries.

The peaceful interchange of goods based upon a profitable division of labor is an attractive picture, which is marred somewhat by the intensity of competition. The serious disruption, however, comes with war. War threatens to cut off the supply of materials necessary for a nation's industry, as, for instance, machinery, or of consumers' goods like coffee or gasoline. To become less dependent upon other countries for such materials and goods, some countries try to build home industries, protected from competing countries by high tariffs, to produce either

210 Sources of Mineral Imports to the United States

A large, highly industrialized nation manufacturing automobiles, airplanes, radios, television sets, refrigerators, machinery, plastics, building materials and a vast array of other products uses almost all known minerals, which are unevenly distributed over the earth. Denial of many of these minerals would be a severe blow to the economy. (Data from *Minerals Yearbook* of the United States Bureau of Mines, 1953.)



these goods or suitable substitutes. Even so, countries seem to become more rather than less dependent on foreign trade.

To assure some supply during war without too severe rationing, nations try to form friendly and informal alliances with other nations, who will be on their side during a conflict and supply them with the desired goods. Such informal and friendly alliances must necessarily be large for a great power, since production requires such a tremendous variety of materials. Thus there is a pressure on the whole world, including those nations that would like to be neutral, to line up on one side or another in a great war. Wars thus become world wars.

Of particular importance to the interests of nations are minerals, which are nature's gifts, often sparse and unevenly scattered over the earth. Thus nickel is needed for alloys; zirconium withstands heat in an atomic reactor; bauxite is the basis of aluminum. The dependence of industry on many different elements and minerals is illustrated by the automobile. Of the ninety-eight known chemical elements, about half are used in making an automobile.[19] Into the making of an automobile go steel, iron, copper, lead, asphalt products, zinc, glass, cotton, paper products, rubber compounds, paints, antimony, aluminum, cadmium, chromium, magnesium, molybdenum, nickel, silver, tin, tungsten, vanadium, asbestos, mica, cork, hair, jute, leather, wood, wool, plastics, and sulfuric acid. This list does not include material used in the manufacturing process, illustrations of which are gold, platinum, mercury, diamonds. There are a host of others. Automobiles are only one of many thousands of manufactured products. A modern industrial state reaches out to the far corners of the earth for materials. No nation has them all. For without them manufacture of war materials could not be made.

Ideological ties strengthen alliances. One group of nations that cooperated in the Second World War and supplied one another was the group of nations bordering on the Atlantic Ocean, sometimes called the Atlantic Community. The cooperation in times of war, and of peace, of so large a group of states is not made formally binding by a signed agreement or contract. The ties that bind are more sociological than legal. Thus one of the ties is ideological. These Atlantic nations, for instance, have the ideology of democracy and are frequently called "the free world." These ideologies are strengthened by citing the opposite qualities in the enemy, such as dictatorship, or by calling them "the slave world." In former times religion had a similar binding quality. Common ideologies and common foreign trade routes are often found to exist for the same group of nations.

Trade, however, is competitive and leads to rivalries. Hence trade is sometimes an obstacle to cooperation, especially when it tends to be monopolistic. England and West Germany are competitors for markets in steel. This competition makes a problem for the cooperation needed in war. Emphasis on ideologies and on friendship helps to resist divisive tendencies of trade rivalries.

The minerals and raw materials of the Middle East and Southeast Asia, such as tin and rubber, are useful to the nations of the Atlantic community; but the bonds of ideology, religion, customs, and language are not close between the nations bordering on the Atlantic and those bordering on the South Pacific and the Indian Ocean. Indeed the ties formerly founded on colonialism are being shattered, and the residues are proving to be sources of antagonism, as between Britain and West Asia. Russia has tried to forge ideological ties with these areas.

[19] This statement and the others which follow were furnished the authors by the Automobile Manufacturers Association.

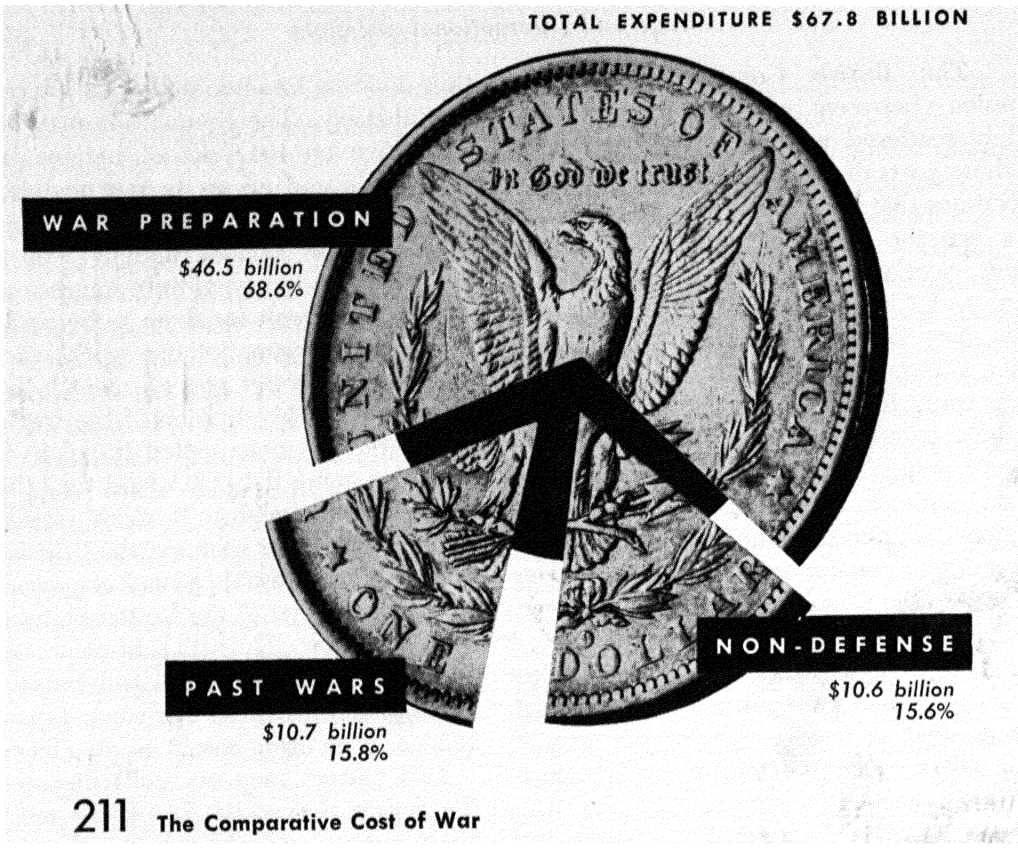
The British Commonwealth. The cohesion between several different and widely scattered nations is well illustrated by those parts of the British Commonwealth of Nations that have self-government. Members are the United Kingdom (England, Wales, Scotland, Northern Ireland, Isle of Man, and Channel Islands), Canada, Australia, New Zealand, Union of South Africa, India, Pakistan, Malaya, Ghana and Ceylon. These countries of diverse religions and races are held together by favorable trading conditions, preferential tariffs, supplies of capital, a common language, democratic governments, and certain cultural heritages like forms of government and law. The countries making up the Commonwealth are, however, so widely scattered that defense in time of war is not easy; and there are tendencies for a country in the Commonwealth to trade outside as well as inside. Special interests of the parts of an empire tend to pull it apart. The Commonwealth may not go the way of empires. It is a remarkable attempt, the first in history, to avoid such a disintegration.

In the relations of states to each other, then, dominant among national interests are the military needs and economic demands. Failure to recognize these is failure to understand international relations and foreign policy.

Patterns of power. National interests tend to group powers into a pattern. This pattern is worldwide now. The raw materials of industrial production are scattered far, from Iran to India to Indonesia to the Philippines to Africa to Canada. The parts that go to make an automobile, an airplane, a reactor, a locomotive — and to run them — draw on many such areas. The demand is greatest in the larger nations who have the most manufacturing and who are the most powerful. Each large nation competes for friendship and influence in distant parts of the world. The whole world seems to be thus dividing into two parts that are competing intensely. The competition may be very aggressive on the part of nations blessed with trade and access to raw materials, or on the part of the "have-nots" against the "haves." The smaller nations who "have not" are often too small to be aggressors, and since it is difficult for them to be neutral or to be free of occupation in a world war, their voice is usually for peace except in case of a local war. This division of the world into two parts was once called bi-polar, one of the poles being the U.S.A. and the other the U.S.S.R. This phrase is more picturesque than realistic. For instance, the British Commonwealth represents a pool of power comparable with that of the United States or the Soviet Union. Thus the bi-polar concept underestimates the might and influence of lesser powers such as Germany, Japan, and France, who bring might to an alliance.

This pattern may not be a dichotomy in the future, for some day India will be a great power, and also China. Nor has the pattern always been a dichotomy in the past. Often the pattern has consisted of one power with or without allies fighting a near-by power aided by close neighbors. Many of the wars in Europe before the coming of the steamboat, the airplane, the radio, and the telephone followed this pattern. Since in such wars attacks were across borders, big nations tried to have friendly neighbors — a zone of influence around their borders. Japan wanted a "friendly" China or at least a China not effectively hostile; and to assure this, she wanted control over the nerve centers of this great nation on the mainland. The Monroe Doctrine was designed to prevent hostile European nations getting too close to the United States.

Non-hostile near-by neighbors are still an asset and part of the power pattern; yet in this age of transportation, neighbors may be in another hemisphere. Airplanes fly over border states, and missiles are expected soon



U.S. Federal Budget, 1954. The mass production of death, like the mass production of goods, requires vast expenditures for machines, as science makes more inventions.

to be able to shoot across the Atlantic Ocean. So the power pattern includes states in all parts of the world.

MOTIVATIONS OF WAR

In the evolution of states and of warfare, invention has been a variable that increased contacts, and population and wealth, and provided destructive weapons, differentially, so that there were always the powerful and the weak. But, of course, inventions alone do not produce wars — unless the will to war is constant over time and between states. It is people who use inventions to increase the size of their country and to make war. The question, therefore, is why do people use inventions to make war? [20]

Economic interests. The answer is to be sought in national interests which are many and varied. At times wars have been fought for tribute or for colonies. A neighbor's vineyard may be coveted. Booty may be quite varied depending on the economic system. But the cost of wars and the value of the loot cannot always be figured by strict accounting methods in advance; and wars may last longer and cost more than expected. Wars often cost more than the economic advantages gained.[21] The motivation for war seems to lie more in the viscera than in the cerebellum. Pugnacity, loyalty, and gregariousness, when aroused, may drive a people emotionally to a point where a calculation of their possible economic gains is negated and the economic interests obscured. States

[20] Bertrand Russell, *Why Men Fight* (New York: Albert and Charles Boni, Inc., 1930).

[21] Norman Angell, *The Great Illusion* (New York: G. P. Putnam's Sons, 1911, 1933).

will fight to maintain their empires, their colonies; and the colonies will fight for their independence. Both ideological and prestige motives are involved along with the economic.

When we stress the clash of economic interests as a factor in war, we emphasize the competitive process which is general in human relations. Just as competition exists between individuals and between groups of individuals within nations for values in short supply, like jobs, money, and social position; so there is competition between nations for oil or coal or territory or power or whatever values are collectively prized. Ordinarily competition is unconscious, impersonal, and peaceful. But when one's competitors are identified, as is readily the case with organized groups such as nations, competition is enlivened by rivalry which flares into conflict as rivals set obstacles in each other's path in order to achieve success.

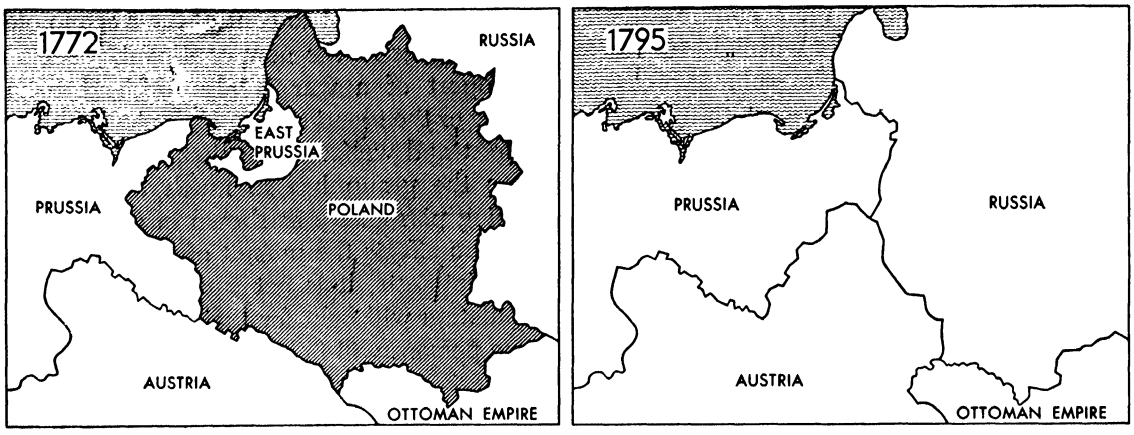
Appeals for popular support. The contemplated economic advantages of war do not always, if ever, accrue equally to each of the inhabitants of the victorious nation. Often one class profits more than another, as in the case of many feudal wars. When wars are fought by other than mercenary soldiers, as by volunteers or conscriptees, the methods of enlisting popular support often result in obscuring the economic objectives. Thus the American Revolution of 1776–1783 was fought not only against tyranny and for freedom, but also to get more income by paying no taxes to Britain and by getting a wider market than that of the British. In rationalizations it is always difficult to draw the line between the strength of the appeal of the rationalized motive and of the underlying motive.[22] The American people were fighting for freedom as well as for more income and the right to control their economic opportunities in the new continent.

Support of a war is also derived from loyalty or the identification of the individual's interest and welfare with that of the group. Since the group has so much to do with shaping personality as shown in Chapter 10 and also affects the pursuit of economic and other interests, it is not surprising that the population will fight for their group. In fact some persons will fight with no other reason for fighting except to beat the enemy or to get the war over with, or because their buddies are fighting.[23] Fighting for one's group, for one's country, for one's homeland may not be to prevent conquest or pillage, but for the glory of one's country or to remove the shame of defeat. The struggle between states sometimes involves matters of justice, or right, and of honor — at least on the part of one of the warring groups; and such ideals are a powerful appeal to the motives of men. To analyze the motivation of war is far from simple because of the mixture of rationalizations, ideologies, economic interests, and appeals needed to arouse popular support, as well as the motives that move those who must lead in war preparation.

The appeal of security. Of the various motives for going to war special consideration should be given to the desire for security. The underlying motive seems to be fear, fear of attack. The preparation for war is furthered on the grounds of promoting security, which appeals to the whole population. This attitude exists in each of the potential opponents. As one arms, another arms. It is a race not only in arming, but also in securing aid from other peoples and in securing military bases close to the enemy. The difference between defense and attack becomes blurred; and given national pride and group loyalty a war may be easily touched off. In this process lies the reason why some think that if we do not arm we

[22] W. F. Ogburn, "The Psychological Basis for the Economic Interpretation of History," *American Economic Review Supplement,* March 1919, pp. 291–308.

[23] S. A. Stouffer, *loc. cit.*



212 Weakness May Invite Destruction

Poland as it existed in 1772, and a map of the same area with Poland divided into three parts, appropriated by Russia, Austria, and Germany, respectively. The state of Poland was thus destroyed, to be born again after the First World War.

shall not have wars. Coupled with this reasoning is the quite naive and erroneous notion that munition-makers cause wars. Also it must be remembered that weakness may invite attack. Curiously, then, the fear of conquest becomes a factor in causing wars. The need of defense is not always a rationalization for aggression. The necessity of arming for defense is very real, as a reading of history shows. The American Indians had no adequate defense against the Spanish, the English, and the French. Poland was once an important nation, but Poland disappeared from the map of Europe until 1918 when other powers restored her boundaries. There are, of course, unarmed neutral states near the path of war; but they are protected by armed nations. Also neutrality is becoming more difficult in a world integrated by much long-distance transportation.

SOCIAL CHANGE AND WAR

Social change as a cause of war. The frequency of modern wars is affected by social change. We have seen how successively new transportation inventions have increased contacts. New developments also produce changes in differentials of power, and upset the balance of power which exists during peace. The introduction of the horse made the peoples of the plains and semi-deserts more powerful, in comparison with those in the settled agricultural villages, than they were before they had the horse. The bigger boat and agricultural inventions shifted power from the Mediterranean to the European Atlantic seaboard. The boat and the steam engine increased the power of Britain *vis-à-vis* France. So empires and nations have risen and fallen because of social change. Shifts of strength and weakness, both relative, provide opportunities for challenge and aggression. And in the future atomic energy will bring new changes, as will the diffusion of the Industrial Revolution to India and China. A change of national boundaries has seldom taken place peacefully.

A great problem of any United Nations is how to change a boundary line peacefully. As the boundary lines of the year 950 and of 1450 are not suited to 1950, so the boundaries of the present will not be suited to condi-

tions of the future. The airplane flies over geographical boundaries more easily than it does over political boundaries. The boundaries of European states — with their barriers to the flow of trade, to the movement of exchange, to communication through diversity of languages, to the redistribution of industry, and to economic integration — seem more suited to the days of the horse than to the railroad and airplane. It is true that wars have eradicated many boundaries of Europe, but if more were eradicated the power and income of Europe would be increased.

Social change results from war. Social change creates opportunities for war in shifting differentials of power, but war also hastens social change. It is easy to see how war speeds change in the size of states and in the growth of government as noted previously, but it also makes trends move faster in many other fields. For instance the trend is for women to work for income outside the home. During a modern war there is a rapid increase in the number of women working for money away from home. So also the influence of war is to accentuate the increase in divorces, which is also a trend. There is more regulation and control of industry, a trend which is slow in peacetime. An increasing trend toward the welfare state is an effect of modern war. Some trends are retarded or reversed, as, for instance, the attendance in high schools and colleges. But an inventory, too long to list here, indicates that war speeds up more existing trends than it slows down.

THE DESTRUCTIVENESS OF MODERN WARFARE

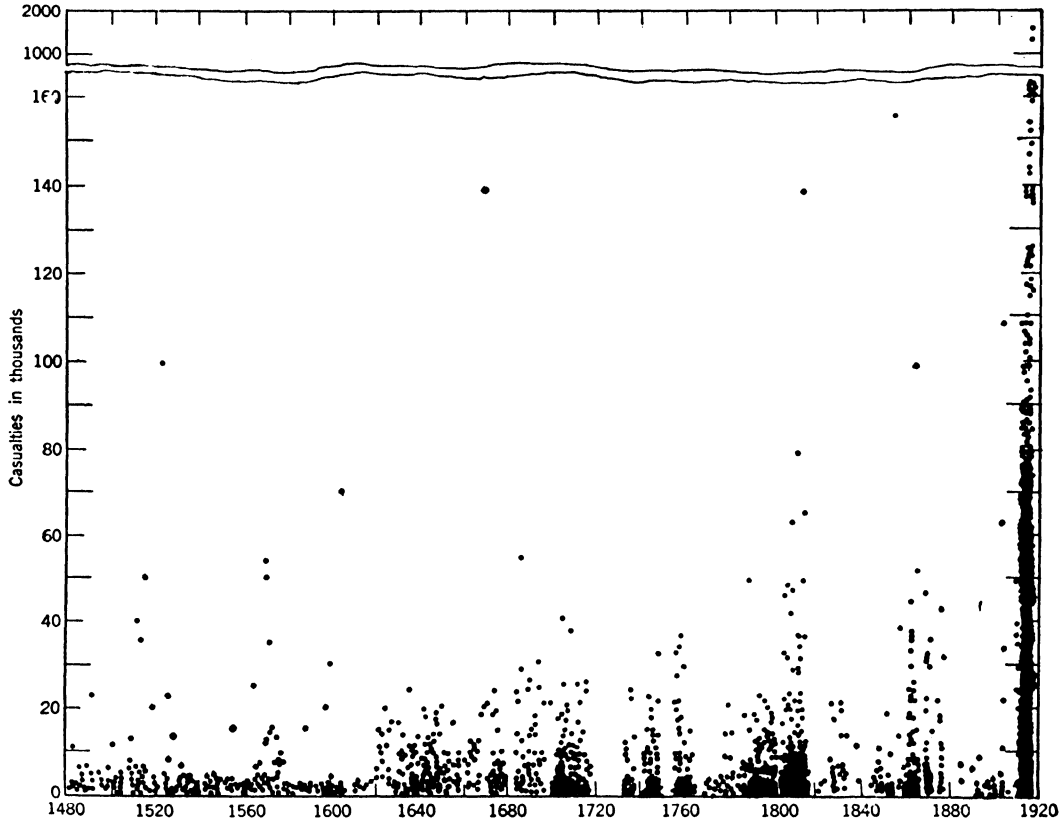
Destructive weapons. Modern technology has expanded production magnificently and has made us richer. But technology has also increased destruction in war, as is shown in Figure 213, which gives the casualties (deaths, wounded, and missing) in battles from 1480 to 1920. The great increase in casualties at the beginning of the twentieth century as compared to 100 years earlier is due in part to an increase in the populations involved. For casualties as a proportion of population, the most reliable data are for France. In Table 35 are shown the number of dead and wounded in battles per 10,000 Frenchmen from 1630 to 1930. The dead and wounded were less than 0.2 per cent per decade in the seventeenth century. In the Napoleonic wars they were around 1.5 per cent and in the decade of World War I, 5.6 per cent. The Franco-Prussian War of 1870 did not last as long as World War I, but if it had, the percentage of dead and wounded would have been very much smaller than in the war of 1914–18. The dead in a war have usually been around one-fourth of the casualties. The percentage killed in these French wars may then have been around one-fourth (very approximately) of the figures in Table 35.

Death of civilians. A revolutionary effect of the airplane has been to bring war to civilians, old men, women, and children, in a manner not seen since the surprise attacks of American Indians. And now comes the four-stage missile that can hit a target,

Table 35 · Number of Frenchmen Killed or Wounded in Battles by Decades per 10,000 Population in France*

Year	No.	Year	No.	Year	No.
1630 .	9	1730 .	10	1830 .	0
1640 .	32	1740 .	36	1840 .	0
1650 .	5	1750 .	14	1850 .	13
1660 .	1	1760 .	7	1860 .	0
1670 .	21	1770 .	1	1870 .	43
1680 .	1	1780 .	3	1880 .	0
1690 .	31	1790 .	148	1890 .	0
1700 .	58	1800 .	119	1900 .	0
1710 .	26	1810 .	154	1910 .	563
1720 .	0	1820 .	0	1920 .	0

*From Quincy Wright, *A Study of War* (Chicago: The University of Chicago Press, 1942), p. 658.



213 **Casualties in Battles by Dates from 1480 to 1920**

Battle casualties have been increasing irregularly since the fifteenth century, in part because of the improved destructiveness of war weapons, which was very great indeed in World War I. (The data are not available for World War II.) This increase is due also in part to an increase in population — which influence has been eliminated for one country, France, as shown in Table 35. (From Quincy Wright, *A Study of War*, Chicago, The University of Chicago Press, 1942, Vol. I, p. 228.)

say, 5,000 miles away and that travels 16,000 miles per hour. There is talk of interception, but it will prove difficult — more so, it would seem, than intercepting piloted planes. About one-tenth of the population of the U.S.A. lives in New York and contiguous territory. The large city makes a remarkable target, and for the death-dealing radiation of atomic bombs exploded in the air a city of skyscrapers is an eminently vulnerable target.

The nation with the fewest cities over 50,000 inhabitants and with large war industries located well away from such centers of concentration will, other things being equal, suffer the least civilian loss, for dispersion of population is as defensive a measure as anti-aircraft.

The hydrogen bomb. The evolution of science applied to war has brought the atom bomb, which was called the "absolute" weapon. But since then a vastly more destructive bomb has been produced. It, too, is an atom bomb but is not, like the first atom bomb, produced by the fission of the nuclei of heavy elements such as uranium. Rather it is produced by the fusion of the nuclei of the lightweight elements such as deuterium and hydrogen.

To comprehend the destructive capacity of the improved hydrogen bomb, 1953, challenges the imagination. Deposited on the central part of Manhattan Island, New York City, its blast damage would cover an area of 250 square miles with a population of 7,500,000. Besides the blast damage, there is the destruction caused by the "fall-out," that is, the descent to the earth of irradiated lethal "dust" particles carried upward by the blast. It is said that with the proper velocity and direction of the wind, the fall-out of one bomb would kill or injure all the inhabitants of Connecticut unless they stayed under shelter for several days. The fall-out of the heavier-than-air particles descending upon the scene of the explosion, usually within a few days or weeks, is not the only danger. Lighter particles may rise above 100,000 feet and, blown up into the stratosphere, may circle the earth indefinitely. Some particles, strontium and cesium, whose radiation lasts a long time, half being lost in about thirty years, are dangerous in that the infiltration is into the bones, though the level of danger is not fully known. Stratosphere particles may infiltrate slowly into the zones of precipitation at any place, irrespective of the area of explosion, during succeeding years. The more explosions of hydrogen bombs in peacetime, the greater is the danger of such infiltration.

The ability of the enemy to deposit bombs by airplanes on a country depends on the number of airplanes that could get through defensive interceptor planes and anti-aircraft guns. Whether the number of bombers that can get through a defense and drop a bomb be one out of ten or five out of ten, it seems certain that incalculable destruction of cities and their inhabitants will certainly occur when countries with large stockpiles of hydrogen bombs fight with intercontinental ballistic missiles.

Bombs can thus reach targets by being shot through the air for intercontinental dis-

214. What Was Left of Wesel, Germany

The airplane has brought war to the civilian population, a revolution in warfare. How can civilians be protected? (Photograph from U.S. Air Force.)



tances. Not much is known at this writing, at least publicly, about defense by interception of such missiles traveling at incredible speeds. The prospect of a guided missile warfare with each side destroying each other's cities and the population therein with single stage missiles is staggering.

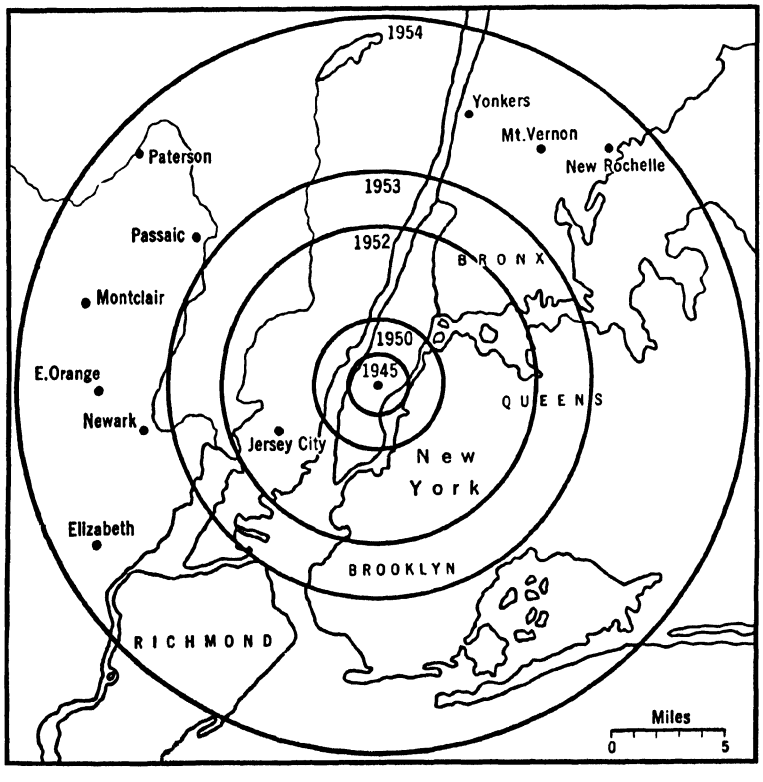
When the first atom bombs were exploded, and until Russia manufactured the hydrogen bomb, not much concern by the people was given to the danger. But now that Russia has a stockpile of them, fast bombers, and Sputniki, the frightfulness of the danger is being somewhat appreciated. A sneak attack is especially a danger; but so are successive waves of bombings. Reprisals are certain, so that cities and populations of both combatants would be destroyed.

The crisis may become greater, for the limit of destructiveness may not have been reached. There is prospect of an even more deadly bomb made with cobalt. In Figure 215 are shown how the areas of theoretical destruction from atom bombs have increased in nine years. Whatever the future may hold, the present situation is sufficiently horrifying.

PROGRAMS FOR PEACE

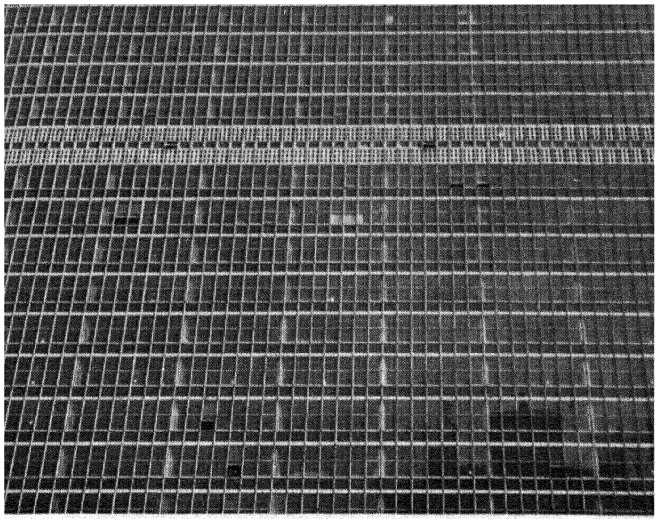
Proposals to prevent war. The application of modern science to the goal of destruction is making war far more terrible than it has ever been. It therefore seems reasonable to think that more concern will be given to maintaining peace; though as primitive hunters men have faced death continuously and have taken many chances with hazards to life and limb through the long ages.

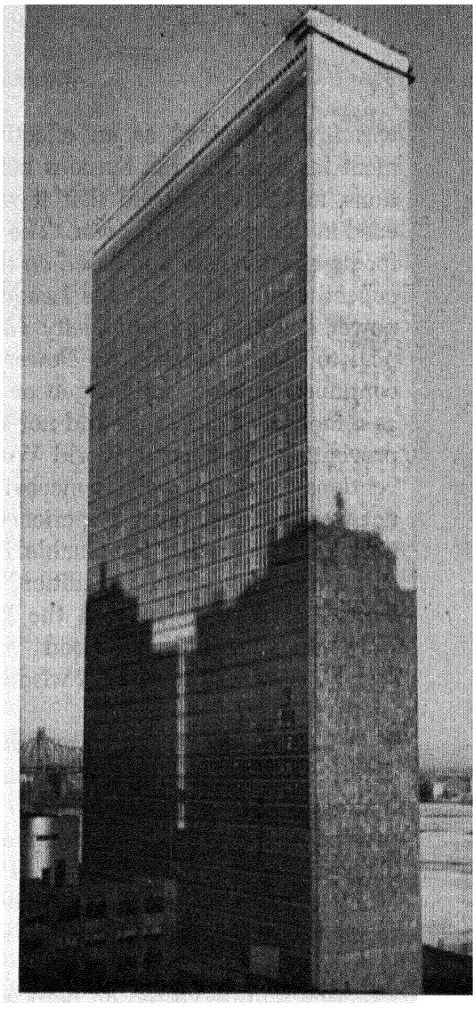
The plan to propagandize for peace by emphasizing the horrors of war, and by lobbying against arming, is dangerous unless such propaganda is also carried on among the peoples of potential enemy states. Britain, between 1919 and 1939, was naturally eager to maintain the *status quo* for herself and the British Commonwealth of Nations and did



215 The Increasing Destructiveness of the Atomic Bomb

The above chart of greater New York shows theoretical blast-damage areas from individual bombs of the most destructive types available at the dates indicated. (From F. R. Allen *et al., Technology and Social Change*, New York, Appleton-Century-Crofts, Inc., 1957, p. 224. After *New York Times*, June 13, 1955, p. 16.)





216 The Tower of Peace

The acme of paradoxes is that the Tower of Peace, the new Secretariat building of the United Nations in New York, is probably the most vulnerable structure in war. It has 5,400 windows, six acres of glass, the perfect design for death by the gamma rays of the atomic bomb, yet the occupants have complained that there are too few windows: (See *New York Times*, October 5, 1950. Photographs by Louis B. Schlivek.)

not want to start a war unless forced to do so, as opinion polls showed. So inadequate was her preparation that she escaped conquest by a hair's breadth. There is danger in unilateral pacifism. Arming for a war with missiles and fusion bombs will not prevent destruction of cities on both sides, but it will deter starting a war for fear of retaliation.

The limitation of armaments by agreement between potential enemies has the effect of keeping costs down and possibly of lessening the destructiveness of war. Such agreements to limit war preparation may break against national interest.

General agreements not to go to war are not binding for long. Sixty-two states had signed the Pact of Paris by 1929 and renounced war as an instrument of national policy. But in a decade the leading powers who thus pledged themselves were at war.

Specific agreements not to produce atomic bombs or other very destructive weapons are difficult to obtain and would probably be ineffective without international control and supervision.

That codes of conduct, such as existed in dueling in Europe during the age of chivalry, may be set up in modern wars to make them less destructive seems unlikely, for rapid social change makes it difficult to establish and to maintain codes. Rather, codes are being abandoned: for instance, we kill women and children in modern wars, though we do not kill prisoners.

The League of Nations, organized in 1919,

was first conceived as an effective instrument for handling the tensions between nations, and it was hoped that it would succeed in doing away with war. The argument for its effectiveness was based on the idea of collective security. But the League had no power except that of publicity and the appeal to collective security. Power struggles continued outside the League or behind it as a façade. The League did not succeed in preventing the Second World War, but inventions, social as well as mechanical, may not work the first time. Experience in international cooperation is valuable in starting and continuing a good tradition. Hence a United Nations to succeed the League of Nations is considered good experience; strengthened and used with wisdom, it may postpone war.

The hydrogen bomb and missile as a deterrent. The dreadful frightfulness of the hydrogen bomb seems at last to have impressed the effective leadership of nations. They are aware that a war with hydrogen bomb and missile will leave cities of both combatants in ruins and bring a loss of life that we can hardly contemplate. Such destruction will be visited on both winner and loser. Both sides will therefore be losers. As the stockpiles of hydrogen bombs grow bigger in Russia and in the United States of America, catastrophe may be close.

It is said that in 1954 and 1955, both the leaders of Russia and of the Allies talked as if they had a tacit understanding that there must not be a war between them with hydrogen bombs. The destruction would be too great. Possibly such a tacit understanding may be more enduring than a signed declaration. On the other hand, such an undocumented understanding in 1955 may not prevent such a war in the future with these deadly bombs. There is no reliable guarantee that the fear of the hydrogen bomb will prevent a war in which they will be used. On the other hand, it does seem that these technological developments — the hydrogen bomb and the intercontinental guided missile — may prove to be a more effective deterrent of a world war than the Pact of Paris.

World government. A plan bolder than Woodrow Wilson's concept of the League of Nations is now proposed; a plan to establish a world federation of states. A federated world government to be effective government and different from a United Nations must have power as a government over its member states, which means that its members must surrender some sovereignty. Such a federated government would surely be difficult to set up. If only some of the states joined, it might become another great power or alliance and not a world government at all. Even so, such a large federation would be, if it succeeded, a further step in the evolution of states in size, and would be an experience in giving up some sovereignty.

The union of states into a larger state has in history been accomplished through conquest much more often than through agreement. Hence, on the basis of history and without analysis of any particular or contemporary situation, a one-world government by conquest is more probable than one by agreement. However, the future may be directed more by reasonableness and intelligence than the past has been, and with less ruthlessness.

A conquest of the world by one victorious side in a world war is, it would seem, a possibility. If Ghengis Khan with horses could conquer one-fifth of the world, could not some big power with airplanes powered by a reactor producing atomic energy and traveling nonstop 10,000 miles in 10 or 15 hours, conquer the whole earth?

A conquered earth would not be a nation, though it might be an empire to be maintained by force. The growth of states in size, first by conquest and then by assimilation, has been shown to be a halting process. Em-

pires have bróken up. Insurrection, revolution and war have been the result.

Indeed we may question whether a one-world government by federation would endure and would prevent wars. In the case of the federation of states into the United States of America, a war was required to prevent disruption into two parts. Much more difficult is the assimilation into one state of all peoples with different languages, different religions, different customs, and particularly, different economic interests.[24] Even the task of accommodation is immense. The forces of integration that make a community a functioning whole are hindered by the power and selfishness of its centrifugal parts.

An enduring world government, however it may be attained, is remote. And the various attempts and experiments in that direction are expected to be accompanied by wars, be they civil wars or successful insurrections. With the present armament race, and atmosphere of competing nationalisms, any discussion of a world government is highly idealistic and impractical.

Before a one-world community. Another approach to the problem of peace is to try to avoid a particular war with a specific enemy, rather than to try to abolish war in general.[25] The first step in such an approach is to understand those national interests of both one's own nation and the potential enemy which are likely to conflict. This is difficult for there is much emotion and confusion woven around the issues. Nor do the peoples or rulers always act rationally in considering their national interests. Does the enemy want to expand for economic or ideological reasons, or for general security? How far will the expansion program be pushed under varying conditions?

The next concern is over the power of the adversary, and the amount of power which will be needed as a check. Good judgment is required concerning what will establish a balance and what will upset it. Herein lies the great danger in the power struggle.

There follows naturally the necessity of a policy which will be based clearly on the objectives to be set for a particular war — that is, objectives other than those aimed at winning. A calculation of what is desired from a war and what is likely to be gained is a deterrent to hasty action. Such advices as the preceding might have prevented the Civil War of 1860–65 in the United States.

Adequate defense is necessary when there are rumors of war. The difficulty lies in knowing when preparations of defense become preparations of offense. Here again is the problem of balance and encroachment. The long range rocket indicates the need of dispersal of cities.

Astuteness and experience are needed in carrying out such an attempt to handle the relations with a potential enemy. Hence the great need not only of astute leaders but of leaders with training and experience. Also an extensive educational program is needed in a democracy with a literate population. Since in a democracy the leaders listen intently to the voices of the people, the people need to be well informed. This program would seem to require that education in international relations be continuous and widespread.

The lessening of fear of insecurity is of help in preventing wars. Fear is often followed by armament and plans for defense which are not always distinguishable from plans for offense. Hence much war talk and saber-rattling are to be avoided.

The mass of people, however well educated, are not the best agents to conduct or participate in many negotiations and diplomatic moves which are essential to international relations and which precede wars and may make them highly probable. It

[24] Quincy Wright (ed.), *The World Community* (Chicago: The University of Chicago Press, 1948).

[25] See Part IV, "The Control of War," in Volume II of Quincy Wright, *A Study of War.*

takes so long to educate the people on issues that the shifts and concessions needed in negotiation cannot be made as quickly by the people as by their leaders. Negotiation and diplomacy are difficult to conduct in a goldfish bowl. Yet on the vital matter of war and peace, the democratic process should operate. But it would seem that capable and courageous leadership is necessary where the people are inadequately informed.

SUMMARY

Man is a fighting animal but that does not make war inevitable. For wars are organized fighting sanctioned by the group, and hence the cause of wars is to be sought in group behavior, which is learned, and in cultural conditions. If wars were biologically determined they would be periodic and present in all groups. But some groups do not fight wars, and wars vary in number from century to century. That man is a fighting animal does not tell us why we fought Germany in 1917 and not in 1907, nor why we fought Germany instead of France.

War is one of many possible relationships between states. To understand war we must understand the interrelationships of groups.

Some observations on warfare between primitive peoples are common to warfare in general: that the probabilities of war depend on contacts; that for wars, religious support is sought, that glory is an attribute of war and is a factor in its encouragement; and that retaliation is frequently found between enemies.

The two outstanding social effects of war are its effectiveness in increasing the size of states and in developing and strengthening government — two very significant results.

In the historical period, conditions favorable to aggression have been created by differentials in population caused by various inventions, and by contact inventions and military technology, which have made some states more powerful than others. The ranking of powers is influenced by these same forces.

The causes of war may be sought in (*a*) inventions or in (*b*) the motives of men who use the inventions. Thus, since war is a variable — that is, it occurs at one time and not at another — it must be explained in terms of a variable. If motives of masses of men were a constant and inventions varied, then we might seek explanations in terms of inventions. But motives of men are variables too. So we want to know the motives that make groups start wars and fight them.

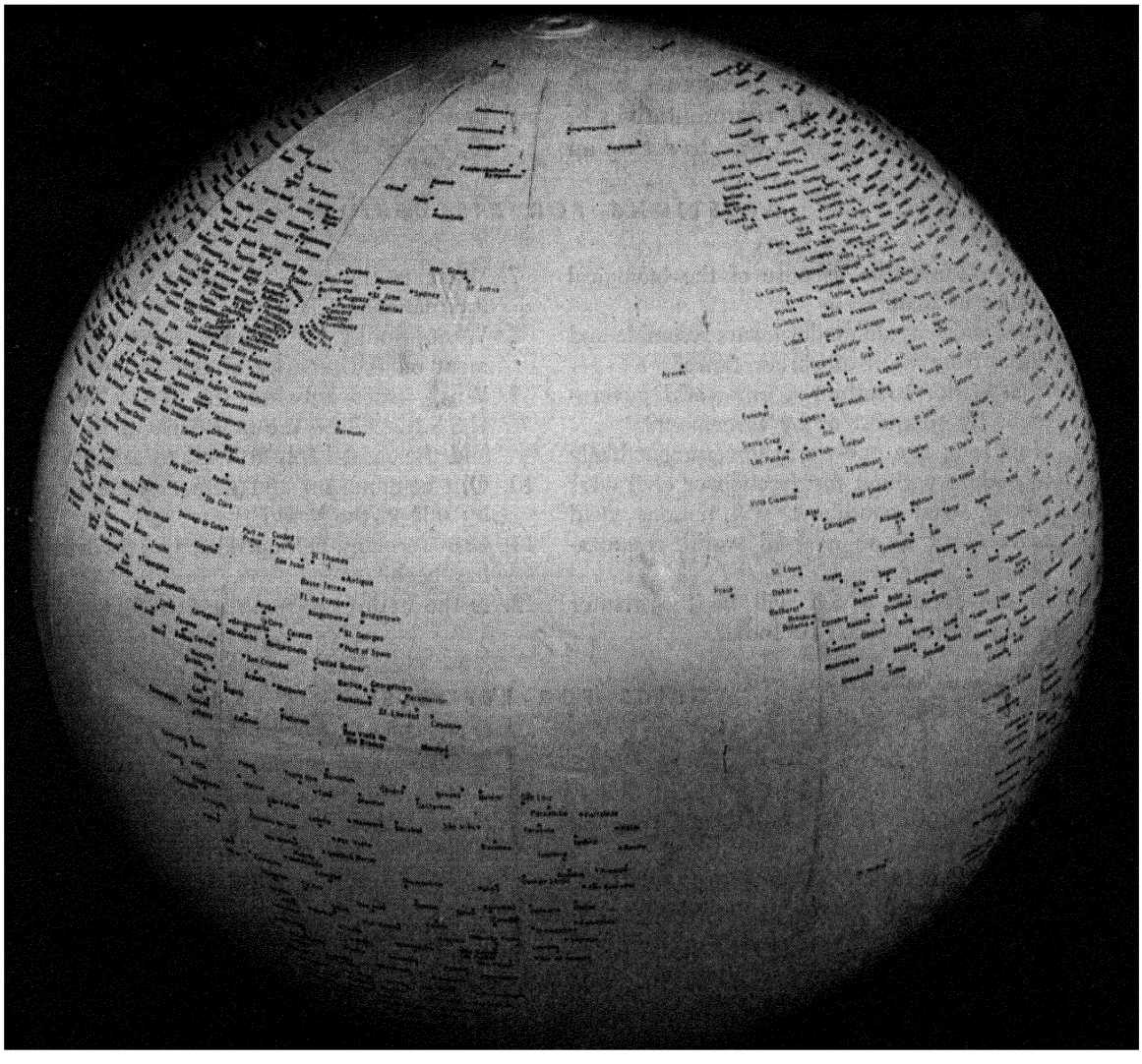
The question first needs to be analyzed. The groups that fight are composed of (*a*) leaders or instigators and (*b*) supporters. The motives may be different for the two. The real motives for going to war may be different from those used in getting support for the war. Selfish motives are sometimes disguised in the clothing of virtue, morals, and religion. In rationalizations there are both selfish and noble reasons, and it is difficult to say which are the more influential. In general, it is good advice to look early for an economic interest of the nations involved, or of a controlling segment of the nations. Motives of glory, of honor, of morals, of ideologies may be involved. The desire for security is a motive of war that needs to be signalized, for it has a wide appeal and the preparation for security often proceeds in the direction of aggression. Loyalty to the group, and the identification of self with the homeland are strong motivations in supporting a war.

As science has increased production and

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217 One World

By "one world" we mean a world that is one community with one government. One world is a world without the boundary lines over which men fight wars. Will the erasing of boundary lines erase power struggles between peoples in different parts of the world? Will the removal of political barriers unify heterogeneous peoples into one community?



thus has been a blessing, so also science has been applied to destruction with such increasing success that we have the atom bomb, missile, and earth satellite.

Facing such destruction, societies are expected to work harder for peace. The peace efforts are to persuade people to be pacifistic, to limit armament by agreement, to effect agreements signed by representatives of different states not to go to war, to set up an international organization to handle tensions between nations, to organize for a one-world government, and to secure and maintain a balance of power between nations for as long as possible without going to war. In all cases, effective social action, especially in a democracy, requires a considerable and continuous education of the people in international relations.

QUESTIONS FOR DISCUSSION

1. Is war inevitable because of the biological nature of man?
2. How and why do modern wars resemble and differ from wars of earlier times?
3. Is it easier to attain a one-world government by conquest or by agreement?
4. How long is a one-world government likely to endure without insurrection or civil war?
5. Under what conditions will nations yield sovereignty to an over-all world organization?
6. In the future, which will be the greater world power, China or India?
7. What is the role of national interests in international relations?
8. What would be considered an encroachment on the security of the United States?
9. What issues between the U.S.A. and the U.S.S.R. will be the most difficult to adjust and the most likely to lead to a war?
10. Can communism and democracy exist side by side in the world?
11. Can Germany be neutralized as Switzerland has been?
12. Is the hydrogen bomb a deterrent to war?

TOPICS FOR REPORTS

1. The national interests of the Soviet Union.
2. The national interests of the United States.
3. The social implications of pacifist movements in the United States.
4. The hydrogen bomb as a deterrent to war.
5. Areas of tension in international relations.
6. The social significance of UNESCO.
7. History of the accommodation of the Scotch to the English.
8. The British Commonwealth as a new form of social organization.

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20

Religious Institutions

When the reader of this chapter is married, the ceremony will probably be performed by a minister, a priest, or a rabbi. If his religion is Roman Catholic, divorce is forbidden. Religion, then, exercises control over the family, itself a great institution. Religion is obviously social.

Religion is at the same time an individual matter. When you pray to your God, what takes place between you and your God is private. Still, the God to whom you pray is social, a God of many; your prayers probably have traditional elements; and the consequences of your prayers may involve others.

Religion not only deals with you, an individual, but it is concerned with government, a social institution. Pakistan's is a religious government. The ruler of Britain is also the head of the Church of England.

There are religious schools financed by members of a particular faith in which doctrines of that faith are taught along with other subjects. These schools may be at the college, high school, or elementary level.

The official connection between religion and modern economic institutions is less close. Perhaps there would be less litigation in the courts if the connection were closer. Still, it may be argued that religion affects business conduct through the religious individual. In certain cultures and at some times, for business undertakings and agricultural activities the blessings of the deity are invoked and economic affairs are supposed to be pursued according to religious directives.

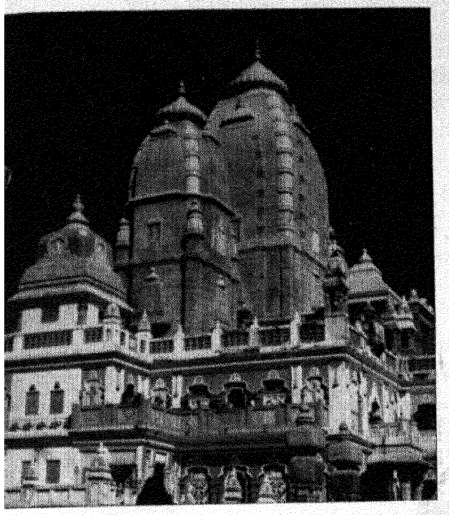
The social aspect of religion is most extensively manifest in its control over our conduct. Religion designates certain acts as sinful. The fear of punishment in hell after death and the promise of a life in heaven in the never-ending future help to make us follow the paths of rectitude.

The group uses religious sanctions to exercise its control over conduct, to exert pressure on us to inhibit anti-social acts, and to punish erring individuals. Thus religion, though personal, is to a high degree social.

THE NATURE OF RELIGION

There are many religions. Most of the readers of this book will be familiar by first-hand experience only with the Christian or the Jewish religion (which have many features in common). In the colleges of India, however, the readers will have a different religion, that of Hinduism. If the reader is a Jew or a Christian and unfamiliar with other religions in other lands, he may think there is only one religion, that is, only one true religion, which is the one he professes. He may not like religions other than his own, and he may think his is the best; but that is no reason why he should not study others, or why he should refuse to admit they are religions.

For instance, some of the religions of primitive people may appear to us to be so dif-



Rangoon Studio

HINDU

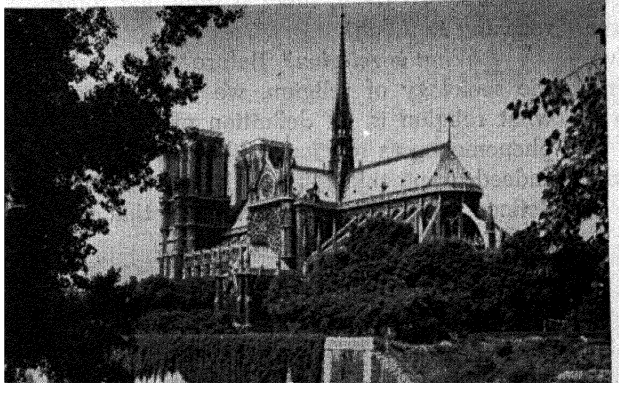


Fogg Art Museum, Harvard University

BUDDHIST

CHRISTIAN

Joseph Muench



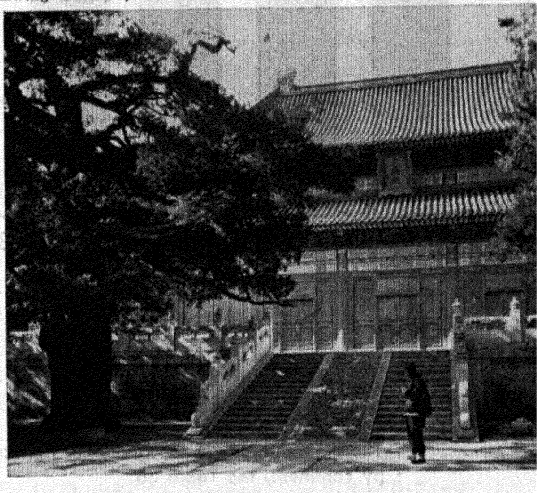


Black Star

MOSLEM

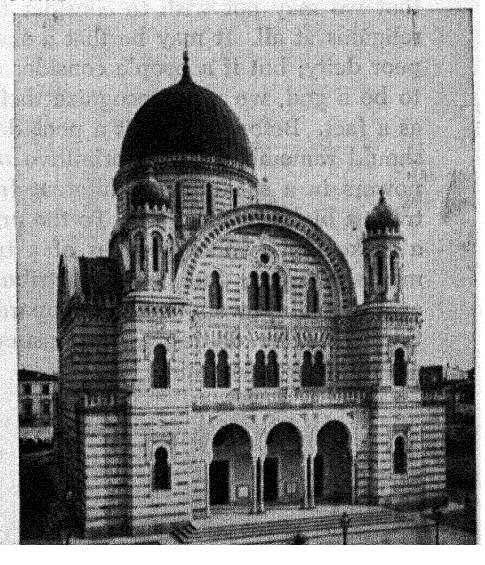
CONFUCIAN

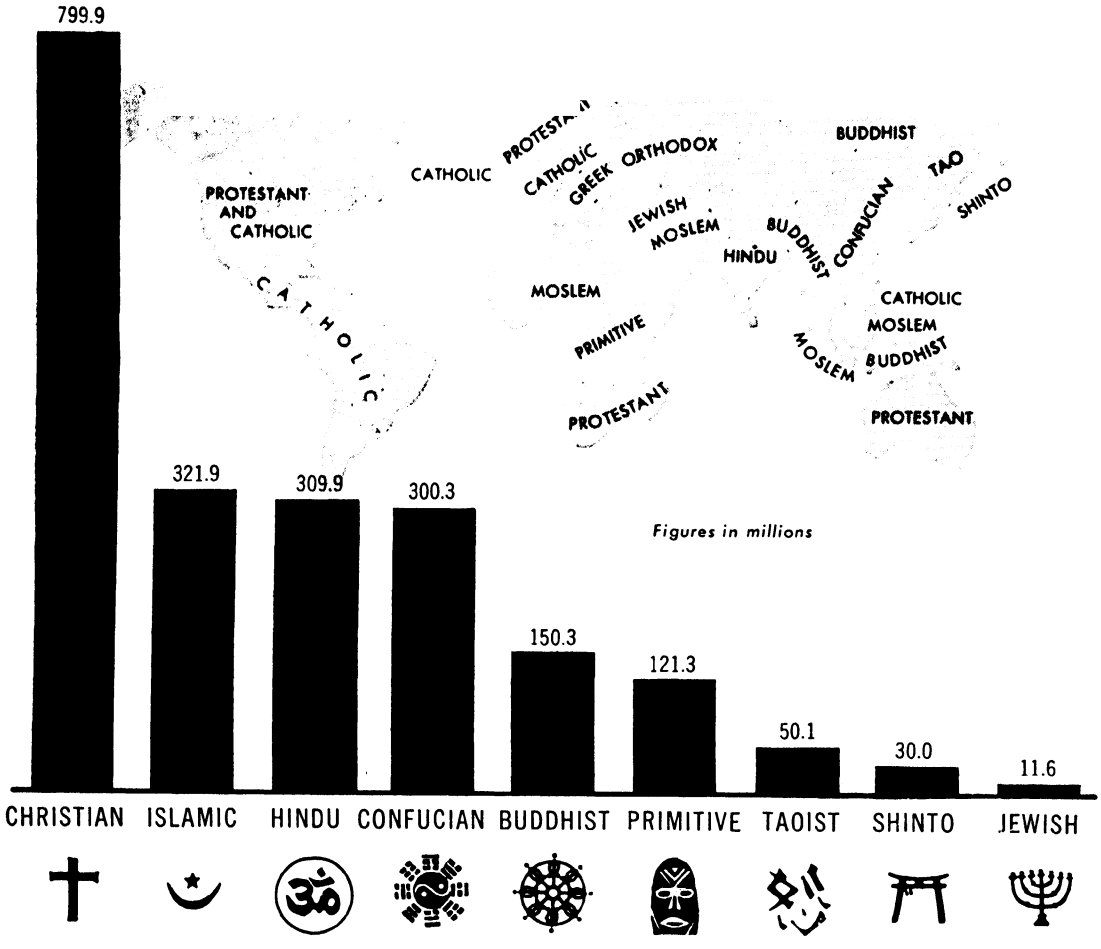
Ewing Galloway



JEWISH

Fratelli Alinari





219 Membership of the Religions of the World

The map shows only the dominant religion of the area. For distribution of religious groups by continent, see Table 36.

ferent from modern religion as we know it that we may not wish to consider them as religions at all. It may be that a snake is a poor deity; but if a people consider a snake to be a god, we must recognize their belief as a fact. Before calling it a poor deity, we should remember that a primitive may see powers in a snake quite different from the traits a biologist sees in it. To the primitive, a snake is a symbol perhaps of a truly remarkable spirit; and he may attribute to it exceptional powers quite comparable to those of other deities, as, for instance, the ability to produce rain.

To the broad-minded and tolerant Hindu, God is universal among many different peoples and is reached by many religions, just as the ocean is reached by many different rivers that flow into it in various countries. This idea is not, however, compatible to the Muslims. To them, there is only one route reaching to Allah.

What is religion? Before we consider the sociology of religion, we should know what religion is. A definition of so rich a phenomenon as religion is likely to be bare. Indeed, some think that religion cannot be defined, but only experienced and that reli-

gious experience is beyond the power of words to describe. To others, definitions are inadequate or erroneous unless they single out the particular characteristic that appeals to them. All other characteristics are not part of religion, they think. However, a definition is needed.

A definition should be based on the characteristics of all religions, not just the one we profess, whether it be pagan, primitive, or pantheistic. Not all agree, however, on the essential characteristics.

A first approximation to a definition is the following: *Religion is attitudes toward superhuman powers.* Let us now examine each word in this definition.

First we consider attitudes, i.e., toward superhuman powers. These attitudes are varied, as shown in worship, reverence, devotion, love, awe, fear, humility, supplication, persuasion, communion, ecstacy. The feelings expressed in these attitudes, though related to the emotions and sensations of the body, are more often expressions of the "spirit." The existence of these spiritual feelings is manifested in "religious" experience, which is nearer the essence of religion than some intellectual proof of the existence of this or that phenomenon. Hence religious experience is not dependent upon shifting beliefs.

Next we ask: What are these powers in which we believe? The superhuman powers which are believed in may be a supreme God, gods, various creatures, good or evil spirits, forces, or a purpose. They are powers in that they have the power of creation or exercise a control over life and death, human conduct, wealth and welfare, crop production and failure, happiness or the course of the universe.

They are superhuman in that they can do things man alone cannot do, although at the same time they can assist human beings or oppose them.

We need some comment upon the word "belief." Belief, which underlies the attitudes toward superhuman powers, is an assurance not dependent upon measurement. We believe in God though we cannot photograph Him. Beliefs can be held with greater conviction than scientific knowledge from a laboratory or from a statistical report. Scientists say that religion is an attitude toward the unknown, that is, unknown in the scientific sense. As science makes the unknown known, a specific belief may change, as, for instance, that heaven is above and hell below the earth, but such a change in belief does not destroy religious experience.

Many of the beliefs we hold intensely are incomparably important. They may shape our personalities, affect our conduct, and be weighty factors in determining the course of society, as is indicated below.

Table 36 · Distribution of the Population (in Thousands) of the World's Great Religions*

Religion	North America	South America	Europe	Asia	Africa	Oceania
Christian . . .	149,794	109,000	457,451	30,000	27,974	25,656
Jewish	5,222	638	3,424	1,610	675	58
Islamic	32	139	3,866	256,252	61,566	75
Hindu	10	275	—	309,264	300	100
Buddhist . . .	165	135	10	150,000	—	—
Confucian . . .	86	95	50	300,000	8	52
Taoist	15	17	12	50,000	1	8
Shinto	—	—	—	30,000	—	—
Primitive . . .	50	1,000	—	45,000	75,000	100
Zoroastrian . .	—	—	—	140	—	—

**Encyclopaedia Britannica Book of the Year, 1955.*

Religion is a complex. While the core of religion relates to a superhuman power, this power finds expression in divers functions, many of which are social and will be presented in later paragraphs. One such function is the regulation of human conduct. The several functions of the religious complex vary from one religion to another and are not the same from time to time. Less of our conduct is regulated by religion today than in the Middle Ages. Even in modern times, recreation on Sunday was forbidden at one time, and smoking cigarettes was considered a sin. The concern with human behavior is different in the Hindu and in the Christian religions. It is very strong in Confucianism. Another function found in many religions is to lessen the tensions of life and to bring peace to troubled souls. Many religions have the function of preparing their adherents for a better life after death.

The organization of religion, as seen in a church, for instance, adds other functions. Thus a church is a center of social life in some communities. There is also the function of educating the children at least in the tenets of religion. Some religious organizations have the function of providing recreation in dances, in athletics, or in social parties. In some cases religious leaders practice the healing art. These functions of organized religion are largely social, and they vary by place and time.

THE BEGINNINGS OF RELIGIOUS ORGANIZATION

Hazards and lack of knowledge were the setting for primitive religious life. Burials with personal property of the deceased suggest that early man may have believed in a life after death, and some of his cave paintings suggest the possession of a religion. In any case, the origins of religion trace back to men when they were food-gatherers and hunters without agriculture.

It is not difficult to imagine how laden with hazards and uncertainties their life must have been. There were lightning, thunder, floods, eclipses, sterility, twins, dreams, physical calamities, illness, and death. Much of the world about them was unknown. They did not know what caused these hazards and irregularities. There is much unknown even in our scientific age with its vast accumulated knowledge. We may not know why we did not succeed in business, why our marriage is an unhappy one, why our child is a problem, why some of us are alcoholic, or why inspiration comes to us no more. There is a world of hazard and of the unknown surrounding the lower animals, too; but they are not biologically capable of conceiving it and hence of reacting to it with emotional and intellectual curiosity.

Primitive people do not know why an epidemic strikes their tribe or why a plague of locusts comes that year. But such crises may cause them to wonder why. Certainly many food-gathering peoples with simple cultures do have an idea of a mysterious force back of these events. But when the fish do not run or when animals change their route of migration, it is not strange that sometimes the peoples, having a belief in supernatural forces, look for omens, or try to manipulate these forces.

The search for answers to the questions of the unknown — "man's quest for certainty" — evolved rather slowly across the ages, just as material culture evolved slowly. The answers are different in different cultures, and the reactions are different. In some cultures, twins seem a violation of nature. They may be deemed a bad omen and put to death. In others, they are treated with circumspection and given special care.[1]

[1] We are told that among the Baganda ". . . the birth of twins was regarded as a most important event, for they were regarded as due to the direct intervention of the god Mukasa, and this necessitated great care and numbers of tabus, in order to retain the favor of the god. Any mistake on the part



220 Fantasy and Fact

The snake dance is an appeal for rain. The Hopi knowledge of how to make pottery is more objective than the Hopi effort to make rain.

The world of ideas of primitive man. It is possible to isolate at least two poles around which different types of ideas of primitive man cluster. One is the pole of fact, where is found such knowledge as that stone is hard, or that friction of dry wood will produce fire. This type of knowledge is not unlike the scientific knowledge of today, in that it can be used for prediction; it is based upon the fairly simple testimony of the senses. It is largely derived by observation through trial and error and without a systematic methodology. There was thus a great mass of very reliable knowledge possessed by primitive man about material objects, the behavior of man, animals, and climate, which could be more or less organized and transmitted from generation to generation. At the one pole, then, is this knowledge of fact.

Quite the opposite of this type of knowledge and at the other pole of primitive man's ideas, are his fantasies. The most extreme form of fantasy is the hallucination. A thirsty traveler crossing the desert sees in his imagination a pool of cool water under a palm tree, water that will quench his burning thirst.[2] Such visions are a characteristic of American Indian experience. Young Indians fast for days in isolation in an attempt to go into a trance and have a vision. Sometimes similar visions are had by several individuals; these are reported and may become a part of the system of beliefs. Wishes are a common element of fantasies and if a form has been created, it may be perpetuated, as is Santa Claus, by the wishful daydreams of adults and children. The emotions back of imagination are by no means confined to

of the parents, or any sickness which befell the twins, was looked upon as the result of the god's anger, which might extend to the whole clan." — John Roscoe, *The Baganda* (London: Macmillan & Co., Ltd., 1911), pp. 64–65.

[2] These are in some cases reflections from surfaces of air that resemble water which can be photographed, but hardly visions of palm trees. See also the accounts of hallucinations in a desert recorded in Antoine de Saint-Exupéry, *Wind, Sand and Stars,* tr. by Lewis Galantière (New York: Reynal & Hitchcock, 1939).

such simple wishes. Some wishes are more complex, like those of self-sacrifice or self-persecution. Probably some such feelings are responsible for the belief in evil spirits such as the devil and perhaps play a part in inventing him.

It must not be thought that imaginary beings are easily invented. Children are said to talk to and play with wholly imaginary playmates, but it is certainly not known that each child invents his imaginary playmate, though some may do so. Such imaginary characters may be transmitted, like children's games, from one succession of children to another. The invention of the idea of a ghost is probably as difficult as that of a mechanical invention, and there is no reason to think that the invention of mythical characters is any easier or more common.

In many primitive cultures there are beliefs about creation. For instance, among the Maori, creation was thought to be the work of their supreme being Io, who began creation in the manner described in the following poem.

Io dwelt within the breathing-space of immensity.
The universe was in darkness, the water everywhere.
There was no glimmer of dawn, no clearness, no light.
And he began by saying these words,
That he might cease remaining inactive.
"Darkness, become a light-possessing darkness."
"Light, become a darkness-possessing light." [3]

The Maori's ideas about the nature of light and the creation of the whole world do not have the same accuracy as do their ideas about the properties of the tools they have and how they are made. Accurate knowledge of the origin of the earth and of light is difficult to get. Our own knowledge in this field is not yet all it should be.

[3] Paul Radin, *Primitive Religion* (New York: The Viking Press, 1937), p. 265.

This dichotomy of fact and fantasy, or of knowledge and the unknown, may be related to what the religious call the *sacred* and the *profane*. The *sacred* is the field of religion, and the non-religious world has been called the *profane*. What is called sacred may be any object. Thus the thunderbird or the coyote may be sacred in one group but not in another. Durkheim [4] argues that the group can make any object sacred. For this reason religion is said to be essentially social. But the objects chosen to be sacred are those which are related to the unknown forces of *mana*, or other powers.

Many primitive religious beliefs are supposed to be of practical help. The Hopi Indians of the United States, an agricultural people, have religious ceremonies to make the corn fruitful. So the supernatural may be related to the hunt, to marriage, to the onset of puberty, to menstruation; and may be found with the activities of the family, of chieftains, of age societies, of men's clubs. Primitive man's beliefs concern not only the explanation of inanimate phenomena and group activities; they become woven into a philosophy of behavior in life. This relation of belief to philosophy of life is shown by the advice of a Winnebago Indian:

My son, when you grow up, see that you are of some benefit to your fellow men. There is only one way you can aid them and that is by fasting. Our grand-father, the Fire, he who in all times stands in the centre of our dwelling, sends forth many kinds of blessings. Be sure that you make an attempt to obtain his.

Remember to have our grand-father, the war chiefs, the spirits who control war, bless you. See that they have compassion on you. Then some day as you travel along the road of life, you will know what to do and encounter no obstacles. Without effort you will be able to gain the prize you desire. The honor will be yours to glory in. If reverently you fast and thirst your-

[4] Émile Durkheim, *The Elementary Forms of the Religious Life*, tr. by J. W. Swain (Glencoe, Ill.: The Free Press, 1947).

self to death then these war blessings will be bestowed upon you. Yet not without constant effort are these blessings procurable. If you do not possess one of these spirits, from which to obtain this strength and power, you will be of no consequence socially and those around you will show you little respect.

Some day in life you will find yourself travelling along a road filled with obstacles and then you will wish you had fasted.

Try to be a leader of men. Yet not with the blessings of one, not with the blessings of twenty, can you go on the war path. For that the blessings of all spirits are necessary. . . .[5]

In these very interesting teachings from the older generation to the younger, it is fairly reliable advice that to overcome obstacles and to win prizes will bring honor and prestige. Such knowledge is as accurate as the knowledge that if you hit a bird with an arrow you will have meat to eat. But the belief that fasting will help you to get what you want without effort is not very reliable knowledge. It is, instead, a fantasy. Many ideas about the good life, about progress, about desirable methods of obtaining goals are, so far as their reliability is concerned, somewhat like the Winnebago faith in the blessings of the war chiefs. Here we see again how the ideas of primitive man, like those of contemporary man, may be organized around the two poles of factual observation and fantasies of the daydreaming type.

The nature of supernatural powers. Although it is clear that individuals in the simplest cultures believe in supernatural power, it is difficult to describe their beliefs with exactness. The problem is somewhat like that of individuals in our own day who believe in God, but who, if pressed for details, might have some difficulty in delineating their conception of Him. The religions of many simple peoples are, if anything, more involved than our own, and more difficult to analyze.

[5] Paul Radin, *op. cit.*, p. 16.

The concept most common to the simple cultures is that of a supernatural, impersonal power — a sort of electric current that courses through the world and is capable of accomplishing all sorts of things not otherwise possible. *Mana* is the name which the Melanesians and Polynesians have for this power; the Eastern Algonquins called it *manitou;* while some of the Plains tribes referred to it as *wakan.* Although impersonal and diffused, this power is capable of entering into objects and persons, giving them properties and capacities they previously lacked. Among the Marquesans, for instance, it was felt that a man who had difficulty in retaining the tribal lore was lacking in *mana,* whereas one who was specially versed in the folklore had this facility because he had considerable *mana.* In sections of Polynesia — Tahiti, for example — the chief has so much *mana* that whatever he touches belongs to him. The idea of the divine right of kings is said to derive from the fact that the rulers are thought to be endowed with special supernatural power.

This belief in supernatural power needs to be distinguished from another idea widely held by primitive peoples, the one that all things may be alive, that is, animated. This system of beliefs is called *animism.* Trees, rocks, and clouds, for instance, may be possessed of spirits of a more specific nature than *mana.* These spirits were apparently regarded as shadowy substances or soul-stuff, and not completely material like the body itself. The Murngin, a simple people of Australia, believe that death occurs when the spirit leaves the body and returns to the totemic well from which it originally came, where all the spirits of the ancestors reside.[6] Likewise, illness is thought to be caused by the intrusion of an alien or evil spirit into the body.

The conception of disembodied spirits is

[6] W. Lloyd Warner, *A Black Civilization* (New York: Harper & Brothers, 1937).

very widespread. The idea could have arisen from dreams, but there are some people where the concept is little developed, though they, of course, dream. The belief in a soul or spirit which may leave the body naturally gives rise to the idea of life after death, and is the basis of ancestor worship and of the notion of transmigration of souls. There are also beliefs in specific spirits which may take definite forms. Some of these forms are deities.

There is considerable variation in the nature of these beliefs. The higher powers may be vague or specific; personal or impersonal; one or many; ancestral; anthropomorphic; or cosmic. While most preliterate peoples have a hierarchy of lesser gods headed by an All-Father, the Kagaba of South America and the Amazulus of South Africa have actual monotheism, that is, a single god as is the case in modern religion.[7]

Again, most supreme deities are men; but the chief of the supernaturals among the Central Eskimo is Sedna, a female; and a female deity presides over the Bella Coola Indians of British Columbia.[8] Today in our cultures the supreme being is less personified than in former times, yet in some primitive religions the supreme power is also a mystical force, not greatly unlike the modern concept.

The social usages of religious beliefs among primitive peoples are evidenced in magic. The religion found in simple material cultures is often much like what is called magic today.[9] We try to influence fate by avoiding the number 13 or by not going under ladders, or what not. The Hopi Indians use sticks with feathers on the end to keep the springs of water flowing. Among primitive peoples, the logic back of religious practices and magical practices is not greatly different. Religion has the greater social approval; "black" magic is somewhat like a false religion to some primitive peoples, and is disapproved by the socially approved religion. On the emotional side magical practices are usually confined to hopeful efforts to control or to prevent certain events. Thus in imitative magic, to get rid of an enemy a small image is made of him, and pierced with a sharp instrument. Or in contagious magic, to bring rain a vessel is filled to overflowing with water. Religion, as well as magic, calls for control and protection. For instance, in the fifteenth century a common prayer in Europe was "God save us from the Devil, the Turk, and the Comet." [10]

The early organization of religion. These early religious beliefs which manifest themselves in organized magical practices, are applied throughout the various activities of man. The manifestations are found most frequently at crises: birth, death, sickness, puberty, marriage, menstruation, volcanic eruptions, droughts, and combat. Disease is particularly subject to magical rites and one may thus say that medical practice among primitive peoples is closely affiliated with religion.

Early religion is also closely related to the economic organization. Although much gathering and preparation of food, as well as fabrication of objects, goes on day by day without reference to *mana*, a charm may be worn for luck in the hunt, and various practices are undertaken at the different seasons to make the earth fertile.

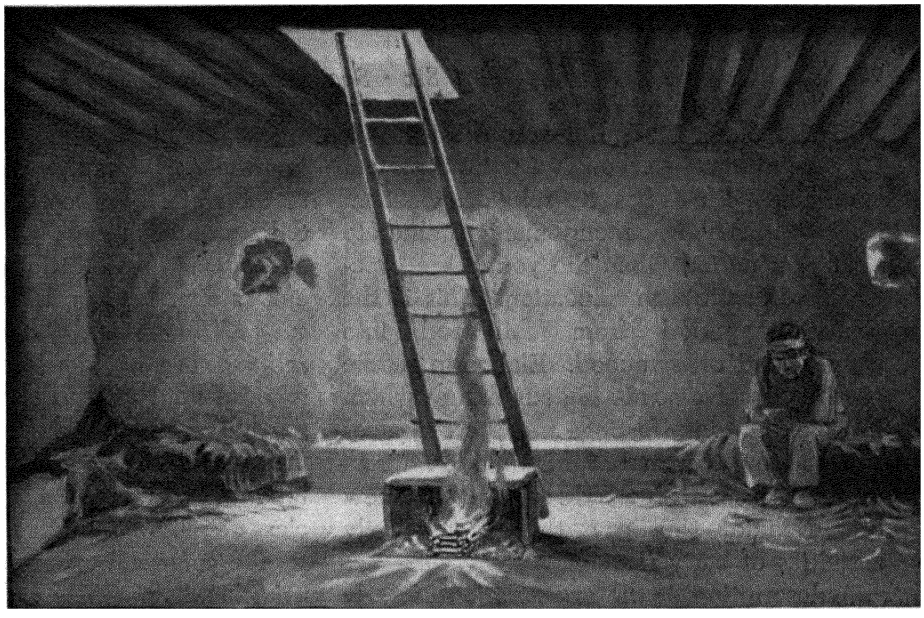
Family life is also closely related to religion. Marriage has its own ceremonies, and birth is safeguarded by magical practice.

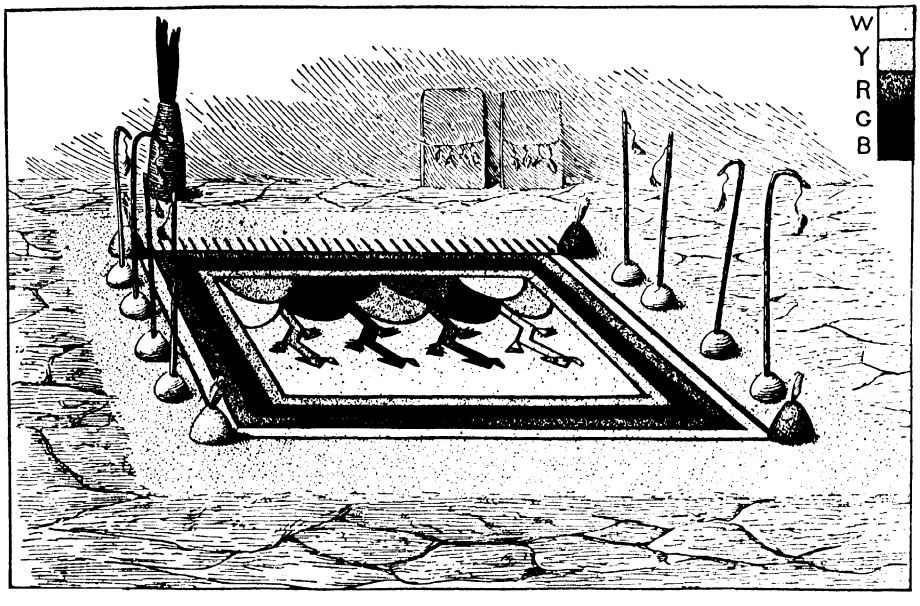
[7] Paul Radin, *Primitive Man as Philosopher* (New York: D. Appleton and Company, 1927), pp. 351, 357.

[8] Franz Boas, "The Mythology of the Bella Coola Indians," *Jesup North Pacific Expedition* (New York: Museum of Natural History, 1898), Vol. I, Part II.

[9] Hutton Webster, *Magic: A Sociological Study* (Stanford University, Calif.: Stanford University Press, 1948).

[10] From MSS in the Library at Cornell, as reported in the *New York Times*, January 18, 1947.





221 Primitive Religion

The kiva is a place of worship among the Pueblo Indians of the southwestern part of the United States, frequently underground instead of above ground as are our temples and churches. There are similarities of pattern between the Pueblo religions and the great monotheistic religions originating in the Old World. In the kiva are images and an altar. The paintings do not hang permanently on the wall as they do in cathedrals, but rather they are made anew, of different colored sands, on the occasion of important ceremonies, and they lie flat on the floor. Shown here are drawings of the interior of a Zuni kiva (above) and a sand painting at the altar of the antelope priests in a Hopi kiva. (Top picture from Smithsonian Institution, Bureau of American Ethnology; bottom picture from Jesse Walter Fewkes, *Tusayan Snake* Ceremonies, 16th Annual Report, Bureau of American Ethnology, Washington, 1897.)

Likewise the education of youth in the folk habits and lore — although a natural part of community life — has its religious connections. Puberty is, among many preliterate people, a period when the young are especially susceptible to education. This is the transition period from childhood into womanhood or manhood. Elaborate public ceremonies of a semi-religious nature which involve suffering, fasting, and the seeing of visions are performed at this time to impress the adolescent with the demands of the new life. Religion thus runs through the daily activities of early man.

A description of the organization of early religion is not adequate without an account of the religious leader, known as the medicine man or shaman, the early counterpart of the priest. He ranks with the chief, or headman, as one of the early leaders, for in him is specialized the power of dealing with the supernatural. The accounts of the shaman among different peoples suggest that in modern civilization he would in many cases be considered neurotic or abnormal,[11] and his visions and trances indicate, at times, epileptic tendencies. Although he is set apart from the other members of the group, any abnormalities he may possess have become socialized so that he is not thought of as an abnormal person to be ostracized, but as a highly useful and gifted individual. He himself seems to have special powers and is probably above the average in thinking ability, imagination, and insight. He is often paid for services in times of sickness and danger, and for his prophecies concerning the future. In addition to his religious and medical functions he also specializes in the folklore, myths, creation stories, and history of his people. The province of the shaman is the world of ideas, especially about the unknown. As the craftsman develops basketry or tools of stone, so the shaman deals with the systematization of thought about causes and effects in the little understood phenomena as expressed in folklore and mythology.

The coming of agriculture influenced religious organization. When peoples learned to raise food instead of depending on wild sources, their life became more settled, and there was a bit more leisure. Eventually food-raising reached a point where a special class of religious leaders could be supported by the community. Shamans evolved into a priesthood, not possible among primitive hunters. With this specialization, there was opportunity to formulate new ideas and to systematize religious thought. Religious thought became highly elaborated when the agriculture of the rich river valleys of the Nile, the Euphrates, and the Indus produced enough food to support cities, as was also the case in the semi-tropical areas of Peru, Mexico, and Central America. In all these areas there was a priestly class, who gave their whole time to religious matters.

While a more abundant food supply made such a development of religious organization possible, it must not be concluded that the development of religion was caused by the inventions of agriculture. For the Australian natives, wandering food-hunters without agriculture and with only a restricted supply, had an elaborate religious development of ceremonies and rituals that surpassed that of many advanced cultures. In other words, if there had been no agriculture, religious ideas would have evolved. It is true, though, that with the village and plow culture and in early cities there is found a greater specialization of religion.

That the evolution of religious organization does not proceed in detail from stage to stage with regularity everywhere is shown by the fact that some primitive peoples have

[11] Australia is an exception. Here the shaman appears to be an entirely normal but very shrewd individual. For detailed description of the shamanistic séance among the Chuckchee, see Alexander Goldenweiser, *Anthropology* (New York: Appleton-Century-Crofts, Inc., 1946), pp. 249 ff.



222 Eskimo Religious Leaders

The shaman, shown driving away evil spirits, is a very powerful figure among primitive peoples. Religion is often highly organized around such leaders. (After Knud Rasmussen, *The People of the Polar North*, London, Kegan Paul, Trubner and Company, 1908, p. 150.)

monotheism, the belief in one god, while advanced groups,[12] like the Egyptians, Greeks, and Romans had polytheism, a hierarchy of gods.

After the hunting cultures, the development of religious organization may be studied first in the changes in organization of religious ideas and secondly in the social organization of religious life.

The growth of religious ideas. The vague ideas about the supernatural commonly found among hunting peoples became in time more specifically formulated into animistic philosophy where inanimate objects become personified. For instance, the sun bestows blessings as a person might. Animals are thought to have marvelous powers: the snake, on a hot day, may bring rain. Although in some cultures the concept of a supreme being has been reached, the spirits are generally thought to assume shapes of animals, gnomes, fairies, heroes, tricksters, rulers, or parents. The life of spirits outside the body is imagined, with the aid no doubt of dreams, hallucinations, and visions. The idea of ghosts, and of life after death with an abode for the spirit or ghost, is constructed. The powers of the ruling spirits are worked into the origin of things, and creations are explained. The general idea of sacrifice as a method is evolved. To placate a definite spirit, foods and living animals, and in some cases human beings, are sacrificed to it.

As the spirits become embodied and behave more or less like human beings and animals — although with remarkable powers and capacities — the religious leaders may deal dramatically with them, as when a living sacrifice is made, or a spectacular dance of the snakes is undertaken to change the weather. The myths are also dramatized, and religious practices become elaborated into dances, ceremonies, and festivals. The winter solstice in the north when the days begin to lengthen is celebrated by the religious leaders, using plants with special properties, such as mistletoe, together with offerings, prayers, and religious songs. Such has been the history of the festival now known as Christmas.

As the spirit world became more varied and definite under the formulating abilities of religious leaders, the emotional reactions of the religious members of the group changed. Fear and awe no doubt remained prominent,

[12] Paul Radin, *Monotheism Among Primitive Peoples* (London: George Allen & Unwin, Ltd., 1924.)

especially since the hazards of life continued. However, the idea of goodness became associated with the powers, especially among the agricultural peoples, in such situations as called for the fruition of crops through the production of rain and the beneficial light of the sun. When the powers of the gods reached out over creation and when they were conceived as the dispensers of goodness and the appreciators of good conduct, man's emotional responses were often those of humility, of glorification, of elation at being identified with the qualities of the gods. This attitude is very well illustrated in this hymn of the Incas:

> Goldtiled thy temples
> Oh! God of the Sun!
> Blood red the battles
> That for Thee we've won.
> Here from the High Priest Rock
> The sunrise kiss we send
> Eastward to Thy Gold-red Orb
> Rising years without end.
>
> Ice-helmeted warriors,
> Thy Andean Peaks stand
> Ranged 'long the thousand miles
> Of thy desert lands.
> Morning and evening
> Their rose pink cloaks they don.
> Their clouds are scarfs of Thy colors,
> Oh! Mighty God of the Sun.

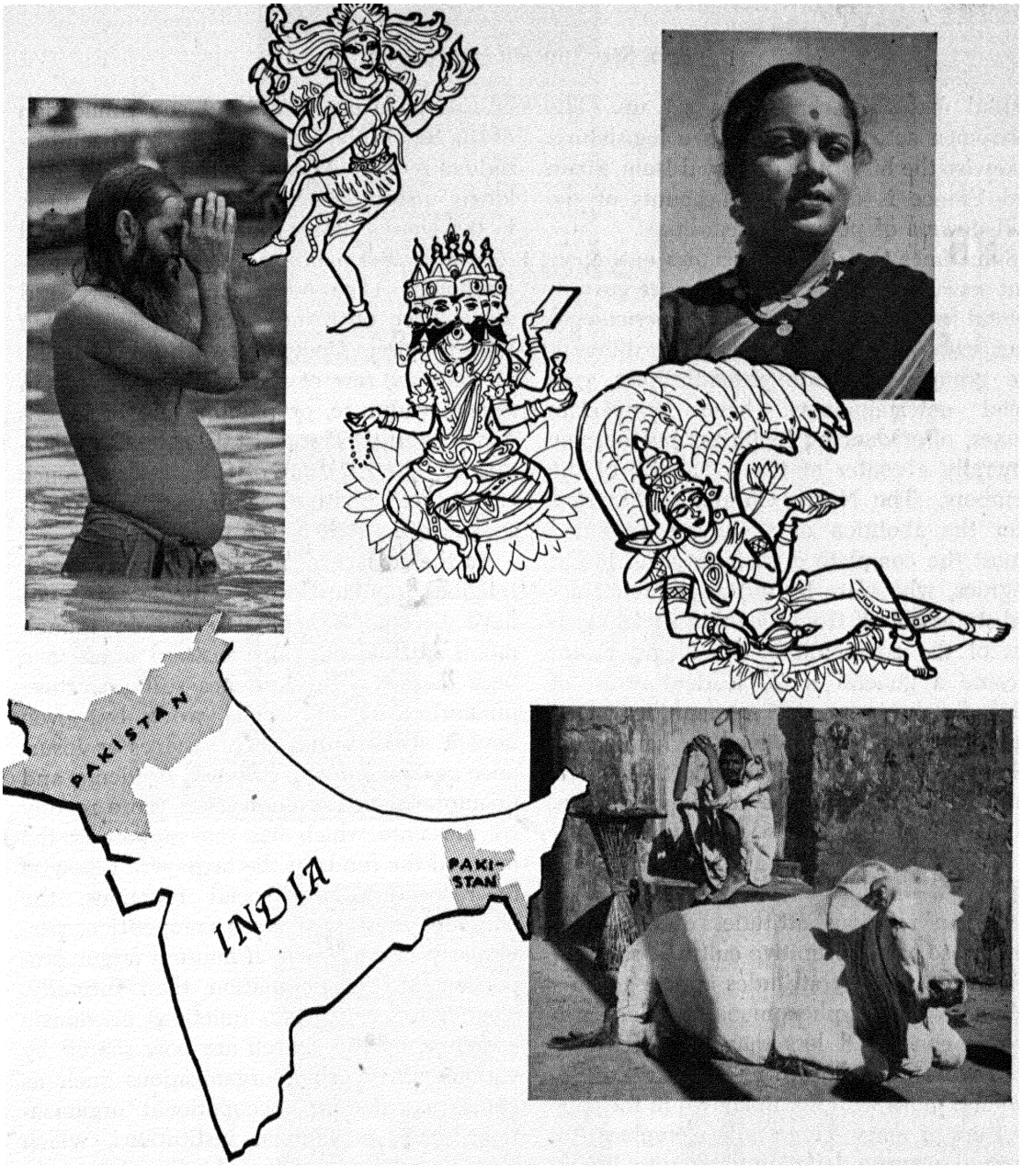
The growth of religious organization. The organization of religion continued to penetrate the various other major social activities, such as family life, acquisition of food, medical practice, recreation, government, and war. In some cultures the ideas of spirit-ghosts and life after death led to a concentration of religion in the great family organization where the patriarchal head was supreme.

Even though there grew up a priesthood that officiated at ceremonies, conducted rituals, and ministered at the various crises of life, the connection between this emerging religious-social organization and the other institutions continued close for a time. Prayer was offered at planting, and thanksgiving at harvest time. Medical practice was often accompanied by prayer or promises of better conduct. Ethical codes were touched with religious sanctions.

Such connections with the other social organizations are found in most of the great religions of the world. The great religions of today have spread beyond language and national barriers and are not correlated strictly with types of culture. In India are found Buddhism, Islam, and Hinduism. In China are Confucianism, Taoism, and Buddhism. In Japan are Buddhism and Shintoism. The Islamic religions extend from Indonesia to Morocco; while in Europe the religions of the Greeks, Romans, Germans and Celts have yielded to Christianity, which was brought also to America and Australia.

In all these religions there is an interpenetration of religion into the many other social institutions of the community. In the case of Confucianism in China, the connection is very close with the family where there is a system of ancestor worship. There also the connection with ethics is highly developed. In India, religion is bound highly to a caste system, hence definitely affects the whole range of social life.

In Europe, the connection between ethics and religion has been so intimate that many individuals consider them to be the same thing. Also in Europe during the Middle Ages, governing functions were common to both the state and the religious organization so that the two seemed to be merged, as in the Holy Roman Empire. Indeed the assignment either of governing functions to the priesthood or of religious functions to the chiefs has been fairly common. The church organization took over, for instance, the governing function in many new settlements in the American colonies in the course of the westward expansion before any civil govern-



223 The Relationship of Hinduism and Indian Society

Religion, through its ties with various aspects of the social order, provides stability for the social system and validates morality. Illustrated here are some of the ties between Hinduism and:

(1) *Medicine:* The bearded pilgrim performs rituals in a sacred river, whose water is used both as a sacrament and for healing. (Photo by Comet from Black Star.)

(2) *Philosophy of Life:* The transmigration of souls, illustrated by the Three Grand Attributes of the Deity — Brahma, the creator, Vishnu, the preserver, and Siva, the destroyer.

(3) *Caste:* the woman in the upper right-hand corner wears a red spot on her forehead, originally the mark of her caste. (Photo from the Encyclopedia Britannica film *India.*)

(4) *Government:* Pakistan, a Moslem state, is now politically separated from India.

(5) *Ethics:* Hinduism's tabus on violence enjoin the killing of animals, especially cows. (Photo by Edgar F. Zobel of Black Star.)

mental machinery had been set up. The vestrymen acted somewhat as a legislature. Likewise the history of medieval Italy, Spain and France is filled with accounts of the civil powers of popes and cardinals.

Sometimes the church becomes an important social institution apart from its governmental functions. Churches in America conduct schools, provide clubs for the different age groups, distribute philanthropies, give social entertainments, have gymnasium classes, offer dancing facilities, and become generally a center of the social life of the members. The Negro Church in America, after the abolition of slavery, represented almost the complete organized social life of Negroes, who were by virtue of their color and status cut off from the other social agencies of the community. The Negro pastor became a general social leader, a sort of chief. So also in farming communities where the farms are not clustered in hamlets or villages, the church has important social functions, apart from its religious services.

MODERN RELIGIOUS TRENDS

Modern religious attitudes differ widely from those of the primitive cultures, so much so that present-day attitudes appear to be a different order of phenomena. Modern religion is concerned less than primitive religions with the unknown in the world of nature and more with the unknown in the spiritual life of man. There is less emphasis on fear and more on devotion to divinity. Fewer activities of daily living are accompanied by religious ritual, but religious people today identify religion with high ethical conduct. The forms of belief are very different.

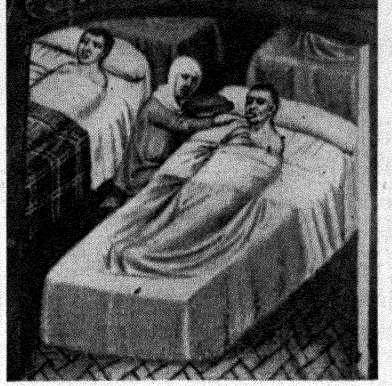
The loss of functions of organized religion. Recent development of organized religion has been that of differentiation from other social organizations and from other departments of knowledge. The church has become separated from the state in a number of European countries, and any connection of the two in the United States has been forbidden by law. Most secular education is no longer undertaken by religious organizations in the United States, but is instead assumed largely by the national, state, and local governments. Like education, both art and music have been increasingly differentiated from religion. Compared with the situation in the past, few of the new productions in music, sculpture, or painting are of a religious nature. This shift is noticed in language. The holy day of the week was once called the Sabbath, then Sunday, and now is spoken of as part of the week end.

As the science of medicine has advanced, religious qualifications for medical practice have become a negligible matter, though moral qualifications are insisted upon to a high degree. The churches still undertake philanthropies and social work, but even here it appears that such services as insurance against old age, sickness, accidents, and unemployment are undertaken more readily by the state which has the support of the law and the funds of the taxpayer. Likewise in respect to the social functions, the churches must meet keen competition, particularly in cities, which house a larger proportion of the population than formerly. That is to say, certain functions previously exercised by the church are now shared by various other urban organizations such as clubs, associations, occupational organizations, and recreational institutions, which have no religious sponsorship.

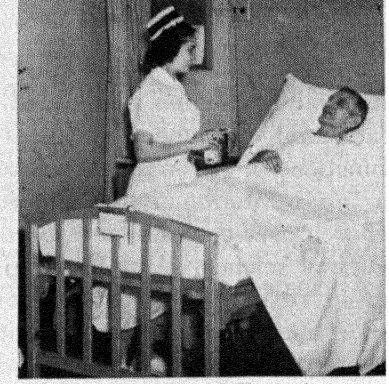
History reveals, then, the transfer of group activities from ecclesiastical to civil and other non-religious agencies, a movement sometimes referred to as secularization.[13] Organized religion as a complex of functions has thus been reduced in size and power.

New church functions. The vast increase in cities in many lands since the In-

[13] J. T. Shotwell, *The Religious Revolution of Today* (Boston: Houghton Mifflin Company, 1924).



The Bettman Archive



Massachusetts General Hospital



The Bettman Archive



New York Graphic Society



Giraudon



Brown Brothers

224 Secularization

Religion once exercised very great influence over such matters as healing, the arts, and government. But today the hospital is staffed with nurses rather than nuns; a secular painting of mother and child, like Picasso's, has become more typical of the spirit of the times than Dolci's (1616–1686) Madonna; a Clemenceau wields the state power in place of a Cardinal Richelieu. Though the influence of the church as an institutional factor has been dwindling, the church may still influence medical, artistic, or political activities through the self-directed conduct of religious individuals.

dustrial Revolution has added to the secularization movement.[14] Cities extend the functions of government, weaken the family as an institution, lessen the control of the church over conduct, and spread the knowledge of science. With the help of the press, radio, television, theatres, commercialized sport and entertainment, recreation and education are further removed from the influence of religion.

One hundred years ago the United States and most of the countries of the world were largely rural. But as cities have increased and grown, they have drawn their population in large part from rural regions. The rural migrants have brought with them many of their social institutions, one being the rural church.

But city conditions are different from those of rural life, and the church has been obliged to make adaptations to the new environment. In villages, people are well oriented socially, for they feel secure in the close ties that obtain within the family and community.[15] Quite different is the situation in the city, with its impersonality of contact and its loosely integrated family life. That the city church has sought to help meet this need of fellowship and sociability is evidenced by the fact that in a fairly large and representative sample of city churches there were two and a half times as many women's organizations as in rural churches, three times as many youth organizations, and twenty-five times as many men's organizations.[16] Table 37 presents 33 activities, exclusive of preaching, found in 357 Protestant city churches and shows how many other new functions have been added that appeal to urban population.

[14] Samuel C. Kincheloe, *The American City and Its Church* (New York: Friendship Press, 1938), Chapter 4; Aaron I. Abell, *The Urban Impact on American Protestantism, 1865–1900* (Cambridge, Mass.: Harvard University Press, 1943).

[15] See Chapter 13, "Communities."

[16] H. Paul Douglass, *1000 City Churches* (New York: G. H. Doran and Company, 1926), pp. 81–82.

Table 37 · Activities of 357 Protestant Churches*

Organization or Activity	Per cent
Sunday school	100
Ladies' aid or guild	90
Women's missionary society	86
Young people's society	83
Chorus choir	76
General social events	63
Men's organization	58
Boy Scouts	48
Mission study classes	48
Organized welcome	32
Orchestra or band	29
Boys' club (not scouts)	29
Lectures	29
Library	28
Girls' club (not scouts)	27
Concerts	27
Girl Scouts or equivalent	21
Mothers' or parents' organizations	20
Young women's organizations	20
Dramatic club	13
Gymnasium classes	12
Sewing classes	12
Kindergarten	9
Domestic science classes	9
Employment office	9
Music classes	7
Visiting nurse	7
Health classes	4
English classes	4
Dramatic classes	3
Day nursery	3
Dispensary or clinic	2
Civics and economics classes	1

*H. Paul Douglas, *1000 City Churches* (New York: Harper & Brothers, 1926), pp. 56, 79.

While the data in Table 37 show that the church is endeavoring to adjust to the urban environment, they also show that the problem of adjustment is difficult. The traditional church functions — Sunday school, ladies' aid society, and missionary society — which are carried on quite generally by rural churches, are most widespread in the urban area, while only 12 per cent of urban churches have gymnasium and sewing classes, 9 per cent an employment service, and 2 per cent a dispensary or clinic. The

city church is new, which doubtless accounts for some of the lag, which in time may be taken up somewhat. But the great expense of these new functions must also be taken into account in any consideration of what the church may be expected to do in the way of adding them. Important, too, is the competition along these lines provided by highly specialized and efficient agencies that have evolved to meet urban needs. City playgrounds, parks, libraries, museums, movies, theaters, card-playing clubs, and professional sports provide more facilities for social and recreational activities than the churches can.

For these reasons many church leaders are now opposed to secularizing the church by adding these new facilities, while still other leaders object to the new activities on the grounds that they obscure the primary religious functions of the church. The question may be raised, therefore, whether the church plays as substantial a role in the city as in the village. In villages, about two-thirds of the adults were in 1935 inside the church, while in large cities of 300,000 or over, 59 per cent were members.[17] Religious beliefs are somewhat more widely held in villages than in metropolises, and church attendance is somewhat greater.[18] The hold of the church is greater in the village, for here the church benefits by the intimacy of contacts, the compulsive force of public opinion, the greater solidarity of family life, and the relative scarcity of competing special-function associations.

Religious beliefs change. Another way in which organized religion has changed from the past is in the nature of beliefs that are held. This change is due in part to the advance of science which has pushed back the frontiers of the unknown and necessarily modified the ritualistic and doctrinal nature of the stimuli that call forth the religious response. The stars are no longer thought to be candles lighted by the angels, nor is it so commonly believed that heaven, the home of God and the angels, is located above somewhere in the neighborhood of the stars. At one time it was not known that the earth was round, and religious leaders believed it was flat. Now, priests and preachers in general no longer believe that the world is flat, since by traveling around it they have proof that it is not so. Copernican astronomy, long rejected as incompatible with Scripture and Aristotelian cosmology, is now taken for granted.

The forms of religious belief have undergone many changes in the past in different religions. The Greeks believed that their gods lived on Mount Olympus, a neighboring mountain. The Hebrews, prior to the time of Moses, also had relations with a number of deities, each tribe having its own divinity, and often even each family. The allegiance to one God dates back to Moses' experience with Jahveh, the God of Mt. Sinai, south of Palestine, with whom a compact was made in return for his deliverance of the Jews from captivity. Religious belief has held that it is harmful to eat the meat of any animal with a cloven hoof; and many religions have believed that property buried with the dead would be useful to them in afterlife.

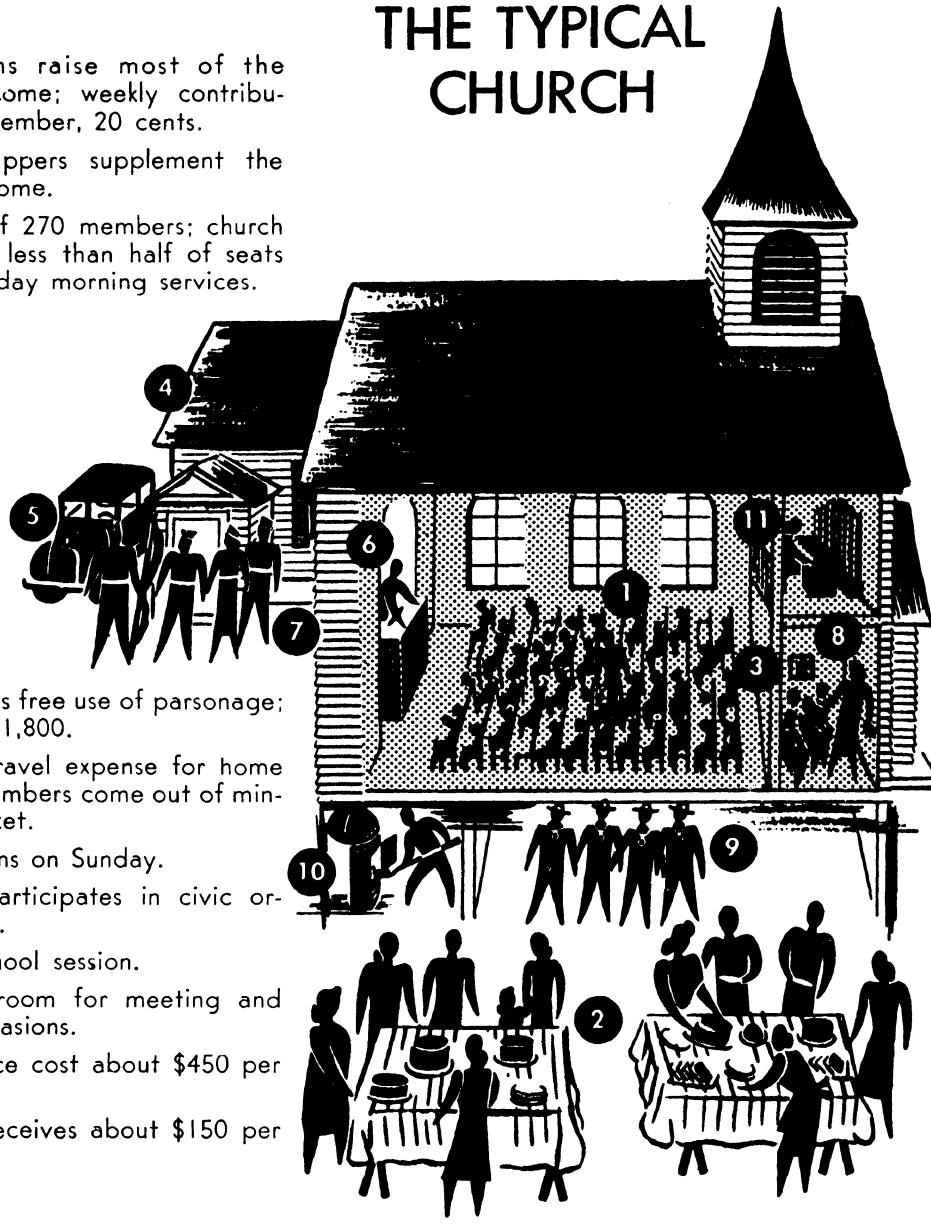
Though the church can and does adjust to changing beliefs, the adjustment is often difficult and comes but slowly. The Copernican doctrine that the earth moves around the sun, and not the reverse, was vigorously opposed by religious authorities before it was finally accepted. Galileo, on pain of torture and death, was forced to recant his theories concerning the natural world. More recently the theory of evolution, with its teaching that man has slowly emerged from an animal ancestry, has been bitterly opposed by fundamentalists as contrary to the Biblical teaching concerning the special creation of man; the teaching of evolution has been pro-

[17] H. Paul Douglass and Edmund deS. Brunner, *The Protestant Church as a Social Institution* (New York: Harper & Brothers, 1935), pp. 39, 41.

[18] From public opinion polls by Gallup taken in 1954.

THE TYPICAL CHURCH

1. Collections raise most of the $3,000 income; weekly contribution per member, 20 cents.
2. Church suppers supplement the church income.
3. Average of 270 members; church seats 240; less than half of seats full at Sunday morning services.



4. Minister has free use of parsonage; salary of $1,800.
5. Car and travel expense for home visits to members come out of minister's pocket.
6. Two sermons on Sunday.
7. Minister participates in civic organizations.
8. Sunday school session.
9. Basement room for meeting and special occasions.
10. Maintenance cost about $450 per year.
11. Organist receives about $150 per year.

225 The Typical Church

Some of the characteristics of the average church in America, showing a few of its varied functions and the secular trend in attendance. The quantitative measures of these activities are for the years before World War II and should be considered only for the purpose of comparing one activity with another. Nor should the comparisons be considered as exact for the postwar years. Church membership has been increasing faster than population but the share of the consumer's dollar spent for religious and private welfare activities is less than that spent for either liquor or tobacco. (From *U. S. A., Measure of a Nation,* by Thomas R. Carskadon and Rudolf Modley. Copyright, 1949, by the Twentieth Century Fund, Inc., and used with the permission of The Macmillan Company.)

hibited in certain localities. An increasingly large number of religious people, however, take the modernist position and see in the facts of organic evolution nothing inconsistent with a belief in God and progress. Indeed, in biological evolution modernists see evidence of divine plan and purpose. Modernists find nothing in modern science to prevent belief in a divine or ultimate power, shaping the world for the better.[19] With Tennyson they look ahead to the

> Far off, divine event
> Toward which the whole creation moves.

As to what people believe, there have been many public opinion polls in the past decade.

The nation-wide poll of religious beliefs[20] held by the people of the United States showed 96 per cent as believing in God and 1 per cent as not believing in God. In the very large cities the percentage of believers in God was 93 and in smaller places 98. The same percentages (93 and 98) held for the young between twenty-one and twenty-nine years old and for those over fifty years old, respectively. Of those who had only a grade school education, 97 per cent believed in God, while of those with a college education, the believers were 92 per cent, though 12 per cent more persons with a college education attended church than did those with only a grade school education.

As to the reasons for believing, this question was asked: "Suppose you were talking with a person who did not believe in God; what would be the best argument that you would give him that there is a God?" The five leading arguments were these:

1. The order and majesty of the world around us.
2. There must be a creator to explain the origin of man and the world.
3. There is proof of God in the Bible (or other church authority).
4. Past experience in life gives me faith in a God.
5. Believing in God gives me much comfort.

In another opinion poll conducted by the American Institute of Public Opinion seven years earlier, around 80 or 90 per cent were reported as believing in God, in Australia, Brazil, Canada, Denmark, Finland, France (66 per cent), Netherlands, Norway, Sweden, and the United States. In 1948 the *Ladies Home Journal* reported 73 per cent believed in personal survival after death; and 15 per cent thought death meant final extinction. Forty per cent of 633 Protestant ministers in the United States, surveyed in 1948, did not believe that the creation of the world occurred in the manner and time recorded in Genesis, and about the same percentage did not believe that the Bible was written by men chosen and supernaturally endowed by God for that purpose.[21]

The forms of religious belief have always been linked with the state of knowledge. The two fields, belief and knowledge, impinge on one another. As knowledge has changed, the forms of belief have been readjusted. Old forms have been given up and new forms added. Some of our best students of astronomy are the most devout religionists.[22] They know the locations of the stars, their distances from the earth, their motions, and their sizes. In all their study of the stars they have not been able to see the heaven that was once believed to be up there, yet their religious faith is unshaken. Similarly

[19] S. Mathews, *The Faith of Modernism* (New York: The Macmillan Company, 1924); Lyman Abbott, *Theology of an Evolutionist* (Boston: Houghton Mifflin Company, 1897); H. E. Fosdick, *As I See Religion* (New York: Harper & Brothers, 1932).

[20] Conducted by the American Institute of Public Opinion, in December 1954.

[21] From an unpublished Ph.D. dissertation at the University of Chicago, by W. Marshon DePoister.

[22] See articles by A. S. Eddington, Sir James Jeans, Albert Einstein, and others in Edward H. Cotton (ed.), *Has Science Discovered God?* (New York: Thomas Y. Crowell Company, 1931).

physicists,[23] who are among our closest students of natural law, see nothing in modern physics that is incompatible with the belief in a deity. As the frontiers of knowledge have been pushed outward, new visions of the unknown are opened up that were not imagined before. The atom, relativity, the nature of matter and motion, the moving galaxy of suns, have given us a world undreamed of a few years ago. Only the form of belief is changed by science, not belief itself. Religious experience may at any one time be linked to a particular belief, such as ancestor worship in China, but religious experience is fundamentally independent of any particular belief.

Is the need for religious experience diminishing? That the essence of religion is religious experience is claimed both by ethnologists studying primitive religions and by modern theologians. These thinkers point out that, while religions differ in their beliefs, religious experience is common to all religions. Religious experience may occur in a communion with a higher being. It is felt in loyalty to a noble cause. There is an ecstasy in the feeling of oneness with a power greater than ourselves. When the travail of spirit seems so great that we are unable to bear it, religion may bring the peace that passeth understanding.

There seems to be little question that the trend of modern culture is such as to make this need for religion a very genuine one. For instance, the modern city sometimes brings a loneliness in the midst of thousands of fellow beings more intense than that felt by the hermit. A lonely person once said "a pane of glass separates me from reality." Reality was there, he could see it, but he could not become a part of it. Religious experience seems to transform such a sufferer and brings cool water to parched lips. Saint Paul felt it on the road to Damascus. Saint Augustine has written about it, and John Bunyan has described what it meant to him. So have many others. We quote here from Tolstoy, who suffered as have many others who lacked emotional integration and a sense of high purpose in life.

> I remember one day in early spring, I was alone in the forest lending my ear to its mysterious noises. I listened and my thoughts went back to what for these three years, it was always busy with — the quest for God. But the idea of him, I said, how did I ever come by the idea?
>
> And again there arose in me, with this thought, glad aspirations toward life. Everything in me awoke and received a meaning. . . . Why do I look farther? a voice within me asked. He is there: he without whom one cannot live. To acknowledge God and to live are one and the same thing. God is what life is. Well, then live, seek God, and there will be not life without him.
>
> After this things cleared up within me and about me better than ever, and the light has never wholly died away. I was saved from suicide. Just how or when the change took place I cannot tell. But as insensibly and gradually as the force of life had been annulled within me, and I had reached my moral death bed, just as gradually and imperceptibly did the energy of life come back. . . . I gave up my life of the conventional world, recognizing it to be no life, but a parody on life, which its superfluities keep us from comprehending.[24]

The spirit of modern religion. Religion in the western world concentrates on the spiritual life. But what is man's spiritual life? It is not possible to define it very well, for we do not yet know much about it in the scientific sense. To the mass of men it is a great realm of the unknown. We have pushed back the frontiers of the unknown in regard to animals and plants, the weather, and the properties of matter; but we have

[23] Arthur Holly Compton, "Can Science Point the Way?" *Forum*, 92: 272–276, May 1937.

[24] Leo Tolstoy, *My Confession;* quoted in William James, *The Varieties of Religious Experience*, 1928 edition (New York: Longmans, Green & Company), p. 185.

learned little of an exact scientific nature about the "spirit" of man. It is still a mystery to most of us why our soul is tortured, why we are depressed today and elated tomorrow, why our conscience behaves as it does, why inner compulsions drive us to do what rationally we do not want to do, why creative work brings elation to our spirit, why we worry. There seems to be an inner life akin perhaps to the "unconscious" which psychoanalysts attempt to describe. In our inner life we have a purpose, just as we have an ambition in our exterior life.

This inner life is present in everyone in some degree, and among primitive peoples, too. It appears to be inherent in the process of adjustment to group and to culture.

Some of us do not get along very well with our fellows, and we become introspective and live to ourselves. We are all frequently frustrated because we cannot always get what we want. We may withdraw into ourselves and build up an inner life and an inner personality which at times we may try to express in painting or in music or in literature, but more often in religion.

Sometimes we react to cultural stimuli in ways we feel ashamed of so that our conscience hurts us. Religion provides a confessional that brings a profound relief to a distressed soul. When we are battered and beaten we turn to religion for comfort. Humiliated, we are able in religion to identify ourselves with a righteous cause and with the personalities of great saints; and our spirit is lifted. When the strain is very great, we feel the need of a good shepherd who will "lead us by the still waters and make us to lie down in green pastures."

Our inner life, thus built up, may become highly integrated around a purpose. Without such a purpose a person is likely to be cynical, or to flounder around like a boat without a rudder. Because religion helps to make our purpose a high one, our conduct is ennobled.

Some see in religion only a collection of beliefs, such as the creation of woman from the rib of man; and, when science shows how the two sexes evolved together in an evolutionary process, the religious belief is seen as erroneous, and religion is cast out of their lives. But they make the mistake of seeing religion as an intellectual phenomenon and identifying it with a collection of specific beliefs.

There are those who feel that we can get along without religion. But they reckon not with the value of religious experience. The need is greater at one time than at another, and is felt more keenly by one person than another. There is much strain in modern life. Our hospitals are filled to overflowing with the mentally sick. Perhaps one reason is the failure of religion to help where the strain of life seems to be increasing. Unfortunately, religious faith is generally coupled with a specific creed, and the shattering of the latter by new knowledge means for many persons the shattering of their faith as well. They fail to see that religious experience is independent of particular beliefs and that they may reorganize their beliefs in the light of the new knowledge. The church also has a responsibility for this situation, since it lags greatly in adjusting its creed to new facts and viewpoints.

The changing social teachings of the church. One aspect of the church which may be singled out for special discussion is the ethical function. The complex of functions called religious organizations has been dwindling so that the church is less closely affiliated with government, with medicine, with education, with art. But one affiliation persists, namely, ethics. Indeed the connection between ethics and religion is so close that many consider ethics as religion. Of course, the moral conduct of non-religious groups and persons may be quite exemplary. Nearly all organized religions sanction codes of conduct that guide the individual along the path

of goodness. Confucianism in its original form was essentially a system of ethics. The great prophets of Israel made the search for justice the heart of Judaism. Fealty to Jahveh, they said, meant doing one's duty toward one's fellow man, the rituals of sacrifice and ceremony being subordinate to the ethical motive. "I hate, I despise your feasts and I take no delight in your solemn assemblies, though you offer me your burnt offerings and sacrifices I will not accept them, neither will I regard the peace-offerings of your fed beasts." [25] Rather, "let justice flow like a river, and righteousness like a mighty stream." [26] "What doth the Lord require of thee but to do justly, and to love mercy, and to walk humbly with thy God?" [27]

While there seems to be little tendency for ethics to leave the church,[28] the problem is rather one of kind. What kind of ethics shall the church teach? Religion generally assumes moral jurisdiction over the conduct of the individual. But should the church also presume to advise the right thing to do on social questions? If it is a sin for an individual to injure the health of a little child, is it any less a sin to employ little children long hours at labor in factories, if such employment injures their health and retards their physical growth? Is it proper for religious bodies to take a stand on child-labor legislation on the basis of right and wrong?

In general the practice is for the church so to instill religion in the individual that he will, as an individual, act rightly in regard to a social question. Thus a true church member would, in his personal behavior, take a stand against such child labor. But if he is an employer and all his competitors employ children, then competition will ruin his business if he raises his costs by employing higher paid adults. And what if the employer of children is not a church member? Then it is the duty of the church to bring him into the fold and deal with his morals as an individual. But it is argued this is an ineffective and slow way of dealing with a social question, for meanwhile little children are suffering. Hence social questions, it is claimed, must be dealt with by collective organized effort. Collective effort can secure an amendment to the Constitution which would enable society to prohibit child labor.

Social ethics should supplement individual effort, and the various religious organizations should attempt to change the social system if need be and to prevent social evils, such as drunkenness, gambling, crime, poverty, ill health, political corruption, and war. Such is the present attitude of many religious leaders who are attempting to direct the trends of religious activities. Poverty, they claim, means a higher death rate, a greater sickness rate, and inadequate education; to permit poverty is wrong, and the duty of the church is to help eradicate it.

Important church groups have made a variety of pronouncements on the social action that the church advocates. The encyclical letter of His Holiness Pius XI [29] on the reconstruction of society dealt at length with the position of the Roman Catholic Church on capital, labor, surplus income, the power of the state, obligations and rights of property, uplifting the proletariat, social conflict between classes, employers' associations, labor unions, strikes and lockouts,

[25] *Amos*, 5:21. [26] *Ibid.*, 5:24. [27] *Micah*, 6:8.

[28] Rather there seems to be increasing emphasis on the ethical function as established metaphysical conceptions are challenged by science and the trend toward secularization of group activities continues. In some systems of religious philosophy, such as ethical idealism and humanism, ethics are ascendant. The Ethical Culture Movement represents this viewpoint. (Cf. Felix Adler, *An Ethical Philosophy of Life* [New York: D. Appleton and Company, 1918]; C. F. Potter, *Humanism, A New Religion* [New York: Simon & Schuster, Inc., 1930].) Modernists also stress the ethical function of religion. (Cf. S. Mathews, *op. cit.*; H. F. Ward, *The New Social Order* [New York: The Macmillan Company, 1919].)

[29] Encyclical Letter of Pope Pius XI, *On Reconstructing the Social Order* (New York: Paulist Press, 1931).

monopoly and communism. The Protestant Federal Council of Churches of Christ in America [30] have stated their social ideals on money, the profit motive, a living wage, health of wage-earners, social insurance, hours of labor, women in industry, collective bargaining, child labor, safeguarding the family, the agricultural problem, rural social work, the uses of liquor and drugs, penal reform, class conflict, war, and free speech. Significant statements have also been made by the Presbyterians [31] and the Episcopalians.[32] The Central Conference of American Rabbis [33] have likewise made a declaration on social justice which deals with the distribution of profits, minimum wage, working hours, day of rest, factory conditions, child labor, workmen's compensation, health insurance, employment bureaus, collective bargaining, arbitration of industrial disputes, housing of the working people, mothers' pensions, dependents and delinquents, lynching, and immigration.

In more recent years the various church organizations have stressed the practice of having committees investigate and report on some specific social problem involving social ethics. Thus the Congregational Christian Church appointed a special committee on church and race in 1946.[34] Out of the work of this committee several lines of vigorous action were followed on the question of race relations which were particularly critical at this time.

Pronouncements on the "social gospel" have recently been less numerous than before because of more realistic experiences of churches. Dr. F. Ernest Johnson, of the National Council of the Churches of Christ, says: "The rather easy and enthusiastic optimism about man and the world which prevailed during the early decades of the century have been tempered by an ethical realism, which has a more orthodox theological base. One result has been a lessening of the confident 'activism' that has been characteristic of liberal Protestant Christianity. The chastening was needed; the disillusionment administered by the events of history has been salutary. Signs are not wanting, however, that the nerve of the 'social gospel' movement is still alive and that its influence will be increasingly felt." [35]

In the years after the Second World War, churches have been active in combating Communism. The Roman Catholic Church in Europe has been especially vigorous in its pronouncements against Communism and also for peace.

As far back as the early 1930's a Council for Social Action was organized by the Congregational Christian Church. The Jews, Catholics, and Protestants all engage in social work and at times have cooperated in this effort. Responses on a questionnaire sent to the denominational headquarters of Protestant churches show that about forty per cent of all Protestant denominations believe that the church should initiate programs of social action in either many or all areas of life, while an additional third or so believe in social action but do not think it is the function of the church to initiate such action.[36]

[30] James Meyers, *Churches of Social Action* (New York: The Federal Council of Churches of Christ in America, 1935).

[31] *The Social Creed: What the Presbyterian Church Believes About Social Problems* (New York: New Era Movement, 1911).

[32] *Social Service at the General Convention of 1922* (New York: The National Council, 1922).

[33] *Declaration on Social Justice* (New York: Central Conference of American Rabbis, 1920–22).

[34] At a Southern Baptist university, a sociology professor read to his class a statement calling for better interracial relations in strong, specific terms. What public body, he asked, did the class think was the author of the declaration? Some said the National Association for the Advancement of Colored People, others, the Socialist Party. They were amazed to learn it had been framed by their own Southern Baptist Convention in 1947.

[35] *The Nation*, July 25, 1953.

[36] Judson T. Landis, "Social Action in American Protestant Churches," *American Journal of Sociology*, 52: 517, May 1947.

The various churches, then, have their religious principles, derived from the authoritative writings of the past, which they seek to apply to specific social action. These recommendations they are trying to build into codes of ethics applicable to modern social evils. New codes of social ethics are in process of formulation, very much as the codes of the Book of Deuteronomy must have once been formed. However, the rapidity of change today makes the task much more difficult, for the social problems of one decade are now not always the same as those of another.

While there are principles that guide churches in social action, their activity is conditioned by the socio-economic groups that comprise their membership. In the Protestant Episcopal Church, with a membership representing a relatively high socio-economic status, the parishioners are less receptive than the leaders to most proposals for change and reform that have come before the triennial denominational meetings.[37] If members are largely industrial workers, then the message of the social gospel will be different from that of churches whose membership is that of the well-to-do upper-middle classes. Probably the more democratic a church is, the less likely it is to engage in crusading, except on more or less universally accepted programs, such as peace programs, or work for better health.

Sects and denominations in a heterogeneous, changing society. From very early times religion has been furthered by organization. Religions all over the world are organized with leaders, churches, temples, holy places, property, as may be seen in Buddhism, Islam, Hinduism, and Christianity. Each of these groups has a variety of special organizations. For instance in the United States there are seventy-six different denominations reporting more than 50,000 members. The membership of eighteen selected religious groups of over 50,000 members is shown in Table 38. Some churches count as members infants and little children, notably Roman Catholics and Jews. Others exclude from membership all children under, say, thirteen years of age. Hence, the membership figures are not strictly comparable. The membership of these eighteen religious groups includes 95 per cent of all church members in the United States.

Table 38 · Church Membership of Selected Religions in the United States*

Denomination	Members in Thousands
Roman Catholic	32,576
Baptist	18,785
Methodist	11,804
Lutheran	7,118
Jewish	5,200
Presbyterian	3,838
Eastern Orthodox	2,809
Episcopalian	2,758
Disciples of Christ	1,822
Churches of Christ	1,600
Latter-Day Saints	1,438
Congregational	1,311
Churches of God	334
Seventh Day Adventists	307
Salvation Army	240
Mennonites	166
Friends	119
Unitarians	93

*The statistics are not strictly comparable, since some churches count little children as members, while others do not. (The ratio of children to adults is about 1 to 4 or 5.) Data from: *Encyclopedia Britannica Book of the Year* (1955); *World Almanac* (1955). Based upon the *Yearbook of American Churches* (1954).

In addition to the seventy-six religious organizations there are 175 smaller churches with fewer than 50,000 members each. Among these, to choose a small sample, are the following: The Apostolic Overcoming Holy Church of God, the United Zions Children, the Pillar of the Evangelistic Associa-

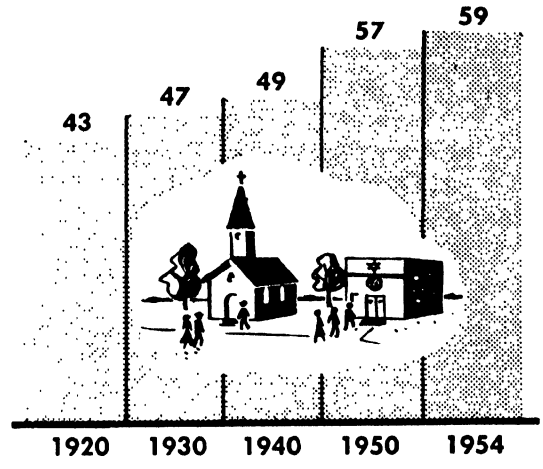
[37] C. Y. Glock and B. B. Rogers, "Church Policy and the Attitudes of Ministers and Parishioners on Social Issues," *American Sociological Review*, 21: 148–156, April 1956.

tion, the Defenseless Mennonites, the Pentecostal Holiness Church, the Two-seed-in-the-spirit Predestinarian Baptists, and the Original Church of God. The growth of organized religion has proceeded, then, with much differentiation, in a country where there is freedom to worship as one pleases.

When the religious organization of a relatively homogeneous and stable society such as that of a primitive people is compared with that of a heterogeneous, dynamic society such as ours, one is impressed by the existence of many religious bodies in the latter, while the former shows a single united church. The presence of many different denominations and sects in a society means that the culture is differentiated into many parts, with differing group interests and viewpoints.

Sects are separatist and exclusive associations of individuals who have broken away from the established church to promote their own interests. Not only are there now various sects within the Christian Church, but Christianity itself was first a sect, arising in a time of discontent and rapid change as the religion of the disinherited, that is, the poor fishermen, peasants, publicans, and outcastes. A sect that survives settles down to build an organization by gaining converts, perfecting its machinery, influencing public opinion, and improving its economic status. Once established, the sect loses its militant character and becomes a denomination, continuing then in a state of accommodation to the other established religious bodies.[38] If its influence becomes great enough — as was the case with Christianity after it had been embraced by the rulers and the upper classes

[38] For fuller treatment of sects and denominations, see H. Richard Niebuhr, *The Social Sources of Denominationalism* (New York: Henry Holt & Co., Inc., 1929); Ernst Troeltsch, *The Social Teaching of the Christian Churches*, tr. by Olive Wyon (New York: The Macmillan Company, 1931); Ellsworth Faris, *The Nature of Human Nature* (New York: McGraw-Hill Book Company, Inc., 1937), Chapter 5, "The Sect and the Sectarian."



226 Church Membership in the United States

The figures, which show the percentage of the total population who were church members in certain years, indicate that church membership has been increasing in the United States.

— then the sect is almost certain to become a major church.

Church membership is increasing in the United States. The number of church members is increasing faster than the population, as seen in Figure 226. Within a third of a century the percentage of the population claimed as church members increased from 43 per cent to 59 per cent. The upper limit is less than 100 per cent, unless infants and children are admitted to membership. The percentage of adults who are church members is much higher than 59 per cent, nearer 80 or 85 per cent. Church membership tends to increase more rapidly in times of prosperity, and the increase has been somewhat greater in the prosperous years since 1940 than in the less prosperous decade of the 1930's. War is also said to stimulate religious interest. It may also be that the use of the mass media of communication such as radio and motion pictures has been a force to increase church membership. Moreover, it is possible that a religious awakening may have occurred independent

of these economic and technological forces. It is said that inactive members are kept on church rolls for a long time. But there is little reason to think that such a practice has changed in the past third of a century. Other evidence is the increased number of church buildings.

An unusual interest in religion in the decade following the Second World War was evidenced in the great popularity of distinguished religious leaders such as Norman Vincent Peale, Billy Graham, Bishop Sheen, and Rabbi Liebman in their books, newspaper columns, and radio broadcasts.

The actual church membership in 1954 reported in the *Yearbook of American Churches* was 94 million. From a different source, a poll taken by the American Institute of Public Opinion of a sample of 3,000 adults, a church membership in 1954 of those over twenty-one years of age of 81 million was estimated, which would probably mean somewhat more than 94 million if persons under twenty-one were included. No other social organization except the family seems to have so many members as does the church. The membership of political parties is less, for the total of registered voters was 80.8 million in 1956 and many of these were independents, not affiliated with any political party. The school enrollment was 30 million.

Religious interests and participation. These sample figures indicate that more women than men are church members, that the largest age group in the membership is from thirty to fifty years of age, that larger percentages of the highly educated are church members than of the poorly educated, that larger percentages of white-collar workers are members than are farmers and manual workers, and that places from 10,000 to 500,000 in population have a larger percentage of their population church members than the very large and very small communities.

Young people participate more than other

THE GROUP STUDIED

Place:	Indianapolis
Date:	1941
Size of sample:	860 married couples
Parentage:	Native-born
Age:	Wife under 30, husband under 40
Religion:	Protestant
Education:	Completed 8th grade
Marriage:	Unbroken; no other

Factors Associated with Religious Interest

Sex:	60 per cent more women "much interested" in religion than men
Parenthood:	Greater religious interest where there are children
Occupations:	Differences greater within than between occupational strata
Income:	Slightly greater religious interest when income under $3000
Education:	No difference by educational level
Vertical Mobility:	Inversely related to religious interest
Early Years:	If spent on farms, greater interest indicated
Intermarriage:	Religious interest greater among couples of same denomination

227 Social Correlates of Religious Interest

(Data from Gerhard E. Lenski, "Social Correlates of Religious Interest," *American Sociological Review*, 18, 533–544, October 1953).

age groups, as measured in percentages, in religious observances in the Roman Catholic Church, as shown in a study of eight thousand white urban southern Roman Catholics.[39] The lowest degree of participation was found in the age group 30 to 39 years. Those in the older age groups participated less than those in the age group 10 to 19 years. There are factors other than age, of course, as for instance sex, schooling, health, parenthood.

Church attendance is also a valuable index of religious activity. A Gallup poll estimated that during an average week in 1955, 50 million adults over twenty-one years of age attended church, or about half of those questioned. Among the men, 43 per cent attended, and among women, 54 per cent. But surprisingly it was found that a smaller percentage, 45, of elders (over 50 years of age) attended church than of the young and middle-aged. The Roman Catholics were found to be more faithful in attending church than Protestants, and a larger percentage of Protestants went to church than of Jews to synagogues.

Unity and cooperation in religious organization. It would seem that there are enough religious denominations to meet the various belief needs of the people. But the question has arisen whether the forces of evil might not be better attacked by a concerted effort among all the various churches. The labor unions find that they must unite to fight employers who are organized into great industrial and financial corporations. Small units of any organization often war among themselves when they might be uniting against a common enemy. Such is the experience among the liberal and radical political bodies. But these political bodies do at times organize into a united front against a common adversary.

Leaders of the churches have appreciated the advantages of a united front, and know that in union there is strength. The Roman Catholics are a strong unit. The various Protestant bodies of the United States organized in 1908 into the Federal Council of Churches of Christ in America (later called the National Council), which has been an active federation since that time. After more than four decades this federated body is composed of representatives from thirty national Protestant denominations.

The work of the National Council has aided in building cooperative organizations in local and state areas, where national leadership was needed. They have also met with some success in coordinating the programs of the different denominations. The organizations of the departments of the National Council give some idea of their program. These departments are on Evangelism, Religious Radio, Social Service, Race Relations, International Justice, Family Life, Christian Vocation, Stewardship and Benevolences, Foreign and Home Missions.

An organization of Protestant churches became worldwide in 1948 when the World Council of Churches was formed by representatives of 135 churches and 44 different countries. The assembly plans to meet every five years, and the affairs of the Council are run by an executive committee in the interim. Various practical matters, such as relief and the interchange of students, are carried on continuously by the secretariat.

The movement for church unity takes a number of different forms and proceeds on a number of different fronts. There are, for instance, nondenominational voluntary associations like the Y.M.C.A. and the Y.W.C.A. Protestant denominations also integrate their programs in various fields, such as missions and religious education. In regard to the religious education, for instance, The Home Missions Councils represent federations of thirty specialized mission boards of twenty-five denominations.

Cooperation exists also between different

[39] Joseph H. Fichter, "The Profile of Catholic Religious Life," *American Journal of Sociology*, 58: 145–149, September 1952.

national churches. Efforts to promote mutual understanding and good will between Catholics, Protestants, and Jews by discussion seminars and other means are being made by the National Conference of Christians and Jews, organized in 1927. In some local communities members of these three faiths cooperate in their social services and often join together to battle against corruption or for some obviously needed reform. National cooperation has been undertaken successfully on many special programs such as provision for refugees.

Complete mergers of denominations, while rare, have occurred in a few cases. In 1925 the Methodist and Congregational Churches of Canada, together with the greater portion of the Presbyterian Church, formed the United Church of Canada. In 1929, the Congregational and Christian Churches of America united, and in 1939 the Methodist Episcopal Church, the Methodist Episcopal Church South, and the Methodist Protestant Church merged once more after their long split over slavery. In 1946 there was a merger of the United Brethren and the Evangelical Church into the Evangelical United Brethren; and in 1948 the consolidation of the Congregational Christian Church with the Evangelical and Reformed Church was voted. The word *ecumenical* has lately been revived in connection with efforts to increase the sense of fellowship and unity among Christians the world over. In 1951 two bodies of the Evangelical Lutheran Church in the United States were united. Negotiations for union of various Protestant churches are in progress in some six or seven different countries of the world.

Competition From Nationalism and Ideologies

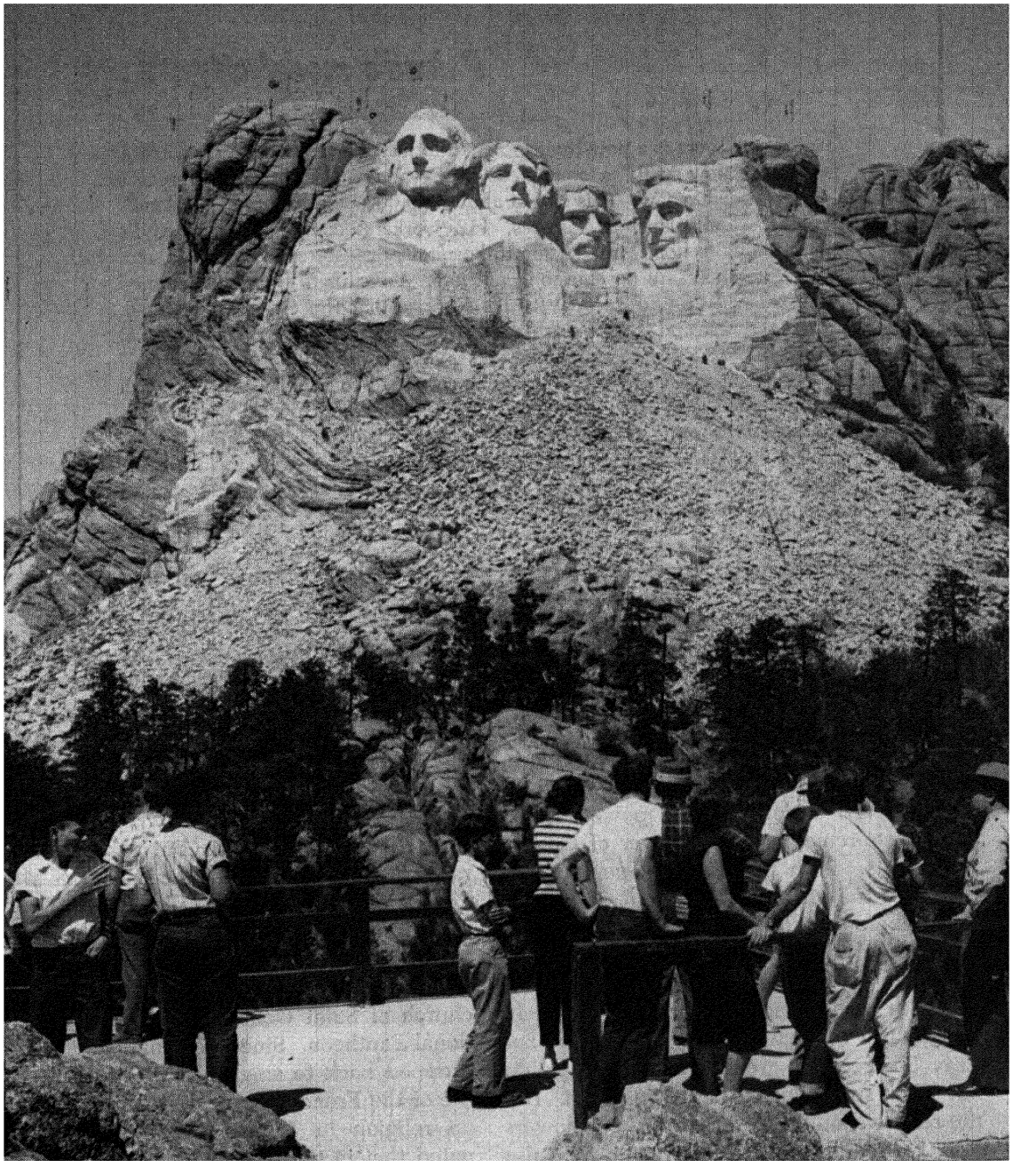
The religious leaders sense the need for unity, for they have competitors for the devotion of mankind in nationalism and communism. Indeed, there are some students who think that nationalism is a religion, and others who think the same of communism.

Are nationalism and communism religions? If religion is an attitude toward a superhuman power, then nationalism or communism can only be a religion if they are superhuman powers. Since both the state and communism are organizations of human beings, they do not seem to be superhuman. They are, however, endowed by their followers with very great powers, which appear at times to be mystical if not superhuman. Thus it was claimed by ardent nationalists, as in Nazi Germany, that man exists for the state rather than the state existing for man. So to communists, the "cause" is seen as a great force shaping the course of history. The answer to this question of whether such ideologies are religions seems to depend upon the conception of the term "superhuman."

But if it is agreed that the essence of religion is religious experience, then the emphasis is not so much on a conception of superhuman as on religious experience. Religious experience may be quite varied. But prominent among these experiences are those of worship, loyalty, ecstasy, self-sacrifice, and identification. Somewhat similar experiences are those of devoted communists and also of patriotic nationalists. In experiences, then, some ideologies resemble those of traditional religions.

Similarities exist also in external characteristics such as rituals and ceremonies.[40] Something like holy writings exist in communism and nationalism. The attitude of communists toward the writings of Karl Marx is like that of Christians toward the Bible. Lenin is equivalent to a saint in Russia. There are national shrines, as, for instance, tombs, to which people make pilgrimages, just as the Christians go to the

[40] Carlton J. H. Hayes, *Essays on Nationalism* (New York: The Macmillan Company, 1926).



228 Shrines of Nationalism

Shrines are now built for national heroes as they once were for saints. Of the four presidents sculptured in the appropriate setting of the Black Hills of Dakota, three were war presidents or military heroes. If this monument had been sculptured at the present time, Woodrow Wilson and Franklin D. Roosevelt would have been included, for the votes of historians name them among the four greatest presidents. These observations suggest the question of whether the times make heroes or whether heroes make history. (Photograph from National Park Service.)

Poland's model city . . .

In Poland, there is a new-built, planned industrial city called Nowa Huta meaning "New Mill," a showpiece of Communist industrial enterprise, located near Cracow. This city of about 100,000 people contains Poland's greatest steel plant, 314 stores, 112 workers' cooperative shops, 14 nurseries, 20 schools, in addition to hospitals, drugstores, restaurants, and bars. But there are no churches, not one. A visitor to this new planned industrial city found one day to his surprise that the city was deserted. All the shops and stores were closed. On inquiring, he was told that "Today is the Feast of Epiphany. They've all gone to church in Mogila," the adjacent village. He found the narrow road to Mogila crowded with men, women, and children in two rows, one heading toward the church, the other returning from it. The Communist leaders of Poland in 1956 built a city without churches, but they did not reckon with the tradition and sentiment of the people, to whom the church is a place of refuge and a source of strength.

229 Communism and Religion

(Adapted from S. L. Schneiderman, "Behind the Scenes in Poland's Model City," *The Reporter*, October 4, 1956, p. 15 ff.)

Holy Land or the Mohammedans to Mecca. There are national holidays and religious holidays. To nationalists the power of the state is supreme, as is the power of God to religionists. Both punish, the one heretics, the other traitors.

But there are differences. Nationalism has no house of worship, nor a holy day like the Sabbath. There is little concern in nationalism with the "unknown," nor is reverence in nationalism of a particularly mysterious nature. So there are grounds for those who do not think such ideologies are religions. But the reader should recall that to the followers of a particular religion, all others are false religions, though they are still religions.

Once before, nationalism rose to great heights, assumed the proportions of a religion, and opposed the constituted religious authorities.[41] This was during and following the French Revolution. It was proposed that the new religion of nationalism be called *La Patrie*. The revolutionists saw in it not only a regeneration of France, but of the human race. The Declaration of the Rights of Man and of the Citizen was called the national catechism. The new constitution was the holy writ. There were civic baptisms, civic marriages, and civic funerals. The great church of Saint Genevieve became the National Pantheon. Since 1793 nationalism has dropped back to smaller proportions in the life of the French people, but it left its mark on religion in France. We have already noted that in the international opinion polls of 1948, the French had the lowest percentage reporting a belief in God. The church lost much of its power and influence because of this burst of nationalistic religion.

The impact of nationalism on religion appears to vary with different phases of the

[41] *Ibid.*, Chapter 4.

nationalistic movement. In the rising phase of nationalism, with its claim on the time and loyalty of men, the competition with religion is often pronounced. But when full national stature is achieved, there is a return to religion, although possibly with some attrition, as in France.

Whether nationalism and communism are religions or not, they do offer competition to established religions for the loyalty of subjects. For in nationalism and in communism are found experiences that compete with religious experiences. In the eastern part of the world, nationalism is rising to a mighty force, and in the West it seems to be increasing, too, though here it is older. In Asia, many millions pay tribute to communism. In some countries the two are united. In others, as in Islamic countries, nationalism and traditional religion are joined. Communism has actually fought and repressed traditional religion. But in the West, the competition of nationalism does not resort to force against traditional religions. If there were no wars, perhaps nationalism would not be so strong a force. Yet in recent years in the United States when nationalism has been very strong, there has been an unusually great increase in church membership. Perhaps these ideologies may not be a threat to established religions, though they do seem to offer competition.

SUMMARY

Perplexed and sore beset because of a world he does not understand, man in his quest for certainty turns to religion, a complex of many feelings and ideas about the unknown. These feelings and attitudes vary in different cultures. Early man reacts to the unknown with fear, he invests the universe with a mysterious supernatural force (*mana*), and he regards all matter as animistic or alive.

Belief in supernatural power is elaborated into a religious organization. Ideas are developed respecting the nature of this power, the methods of acquiring it, the beings who possess it, and the appropriate regard in which they are to be held. Appropriate rituals are established, and special leaders are developed for the religious life, although there are at first no separate religious groups. The religious complex is, moreover, tied up with the rest of human experience so that religion affects familial, educational, governmental, recreational and social activity. A distinguishing trait of early religion is its social pervasiveness.

Although moderated somewhat as religion became more specialized, such connections of religion with other social organizations continued until relatively recent times, when the vast increase in cities resulting from the Industrial Revolution accelerated the trend toward secularization. Modern religion also differs greatly from early religion in laying less emphasis on fear and more on devotion, and in being less concerned with the unknown in nature and more with the unknown in the spiritual life of man. The compelling need for an integrating force such as religion supplies is evidenced by the vast amount of personal disorganization in our time. Although science with its new knowledge about man and nature may require certain modification in the forms of religious beliefs and practices, only the forms are changed and the need for religious experience continues. Religious people identify ethical conduct with religion and emphasize social ethics as a supplement to individual ethics. Since about 1890, and after the extensive diversification of sects and denominations, the Protestant church has sought to increase its organizational strength through the unity movement, which has become especially active in response to the growing threat of nationalism.

QUESTIONS FOR DISCUSSION

1. How far back in the history of culture do we find evidence of belief in supernatural powers? What is the significance of this?
2. How is magic connected with religion in primitive cultures? How do the two differ at present?
3. Is there any relation between the type of religious practice and the level of material culture of a people?
4. How does the state of culture affect the nature of a people's fantasies? Cite concrete illustrations from modern culture.
5. In what ways has the church adjusted itself to modern life? In what ways has it failed to do so? Is it desirable that the church keep pace with modern change?
6. What are the societal functions of religion?
7. What is the effect of scientific knowledge on religious ideology and practice?
8. How does the need for religion in modern times compare with that of times past?
9. What functions should the church exercise? Should it confine itself to religious activities or take on social, educational, and political functions as well?
10. What kind of ethics is the church likely to teach in the future?
11. What is the relation between denominationalism and our heterogeneous, rapidly changing culture?
12. May communism and nationalism be considered religions? Elaborate.

TOPICS FOR REPORTS

1. The quest for certainty.
2. The guardian spirit of the North American Indians.
3. Religion versus magic in modern American life.
4. The social significance of the Negro church in the United States.
5. Nationalism as a religion.
6. The personality of the religious leader in primitive society.
7. Recent discussions of the relation of science and religion.
8. Religion and mental hygiene.

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A colorful account and able sociological analysis of a religious sect, the Russian Molokans of Los Angeles. Valuable in showing the origins of the sect in the protests of a minority group against the established moral order, and the problems of accommodation faced by such group.

21

The Family

The family today seems to be a troubled institution. Under current conditions, close to one in five marriages in the United States is likely to end in divorce; and the number of separations without divorce is large. Families without children are numerous. Nearly one-half of all families are without a child under 18 living at home, and in 1950, one-fifth of the married women who reached forty-five years of age had never borne a child. This situation disturbs many persons, because the home is the place where the personal and social virtues are developed. The type of citizen one becomes is related closely to the type of mother, father, and home life one has. What happens to so significant an institution as the family is of great concern to society.

The present status of the family is the end-result of a long historical process; the modern scene cannot be fully understood without some knowledge of what has gone before. Moreover, it is helpful to inquire how variable and flexible the family has been in earlier periods and in different cultures; such knowledge may throw some light on the probable future of the institution, suggesting the limits of its ability to change to meet changing conditions. A study of the family in the earliest hunting cultures, and what changes occurred in it as the material culture developed into our present civilization, will afford a better understanding of family life today and its possible changes in the future.

BEGINNINGS OF FAMILY ORGANIZATION

What the Family Is

When we think of a family we picture it as a more or less durable association of husband and wife with or without children, or of a man or woman alone with children. The sex and parental functions are distinctive of the family. They constitute the primary *raisons d'être* of the institution and are common to the family in all cultures. The primary personnel of the family consists of mates and their offspring.

The family, however, is not necessarily limited to these individuals and functions. It may be much larger and may include, for example, grandparents, relatives, in-laws, and grandchildren, all forming a unit which is sometimes called a household. The structure of the family is not fixed; it varies in different cultures, as will be shown below. Likewise the functions of the family are flexible. The family may do few or many things. In addition to the functions mentioned above, the family may provide economic services for its members, it may help to educate them, give them religious guidance, furnish recreation, protect them against dangers of various sorts, and provide affection and social intercourse. It is important in appraising the significance of the family in any culture to ascertain what functions are performed and to what extent they are exer-

cised. The family may thus be interpreted in terms of its varying structure and functions.

The Early Family

The family is found in every hunting society known to us, no matter how simple its material culture. Unlike the government, church, or even village, the family is present everywhere among these simple peoples. It generally consists of a male, one or more females, and children, with perhaps a relative or so. The husband is a hunter, the wife prepares food, and the women and children help to gather wild vegetables, to dig roots or to pick berries. Indeed, the hunting community may be viewed as an organization of a relatively small number of families.

What the family was like before culture was this far advanced is a matter of speculation. However, we know that a more or less durable union of male and female exists among the primates. The male, generally larger than the female, often shows signs of jealousy and possessiveness, which may account in no small part for the stability of the union. Again, while the mother alone might be able to provide food for the offspring, no doubt the aid of the male is helpful. Besides getting food and caring for the young, the anthropoids help each other in fights, and the male "protects" the female against marauding males. However, various other group functions characteristic of a culture are not present, and the household does not consist of relatives, although occasionally an unattached individual joins the family group. Where the primates live in bands, the bands consist of several family groups that forage together for food, keeping generally out of one another's way, except for occasional fights over females.

The family organization of a baboon colony is reported as follows by Zuckerman:

> A family group consists of a male overlord, his female or females, together with their young, and may sometimes include one or more "bachelors" or unmated males. The bachelors are not an essential element in the party, although they may be attached to it, according to my observations, for as long as a year . . . they appear to be held to the group mainly by their interest in the females, but it is possible that they are also attracted by the overlord. . . . One male, the biggest in the group, owned eight females, three had three each, three had two each, and there were five monogamous family parties. The owners of the more mature females appeared to be the more powerful males. Some of the unattached sexually mature males were bigger than some of those that were mated, and a few of them accompanied family parties in their movements. . . . A "bachelor" was not included in the largest family party.[1]

The broad outlines of the history of the family do not suggest any great evolution such as we find in material culture, which moved from broken stones to elaborate engineering; or even such as we find in government, which grew from simple leadership to the great nationalistic state. The early family group seems to have many resemblances to the modern family in its small size and in its relatively high physical mobility. Still, the family is not a static institution. Although there has been no evolution in a linear direction from the simple to the complex, the family has varied greatly in different cultures. Some of these variations may now be considered.

VARIATIONS IN FAMILY ORGANIZATION

The Relationship Between the Family of Orientation and the Family of Procreation

Each of us belongs to at least one family — the parental family in which we grow up,

[1] Solly Zuckerman, *The Social Life of Monkeys and Apes* (New York: Harcourt, Brace & Co., Inc., 1932), pp. 225–226.

which gives us our bearings and helps to socialize us and which has, therefore, been designated the family of orientation. In due course most of us by marrying and by having children of our own form a second family, referred to as the family of procreation. The relationship between these two types of family, the family of orientation and the family of procreation, shows interesting variations in different societies and at different times in the same society.

The simple, independent family is the most common form. The most common form of the family among preliterates is much like our own, an organization built around the nucleus of husband and wife and offspring. Each family is an independent unit and functions apart from other units of the same sort. In some cases additional members, such as relatives, may be added to the family circle, but there is no formal connection of the simple biological family with any larger organization.

The stability of such a family is, however, limited in duration. It is formed at marriage and is dissolved at death. There is thus a disruption at this time of the economic and social functions, and the institution has to start all over again with the marriage of the young, who are more or less inexperienced. Where property is involved, some continuity is had by rules of inheritance. But on the whole a small group of father, mother, and children is not the most efficient unit for performing certain economic functions, although it may be highly effective from other standpoints, such as the satisfactions that come from privacy and close personal relationships. The biological family, then, is not an effective organization for production from the point of view of continuity and from the point of view of the number of workers. The growth of social security programs by government in behalf of families also reflects the inability of the nuclear family to provide satisfactorily for its members in terms of economic need.

The American ideal is a separate household for each married couple. Although about one-fifth of the couples do not set up a separate establishment during the first year of marriage, by middle age virtually all couples have a home of their own.[2] Thereafter the amount of doubling-up does not rise very much, except in extreme old age.

The ideal of the separate household reflects the American norm of independence of married children from parental control. But even though there is no formal tie of the conjugal pair with in-laws, family continuity is often maintained by indirect or informal means. Parents try to influence the choice of a mate and offer aid in establishing the new household. Research has shown that family continuity is generally greater where the child marries a mate of similar cultural background than when the choice involves someone with different religious and socioeconomic status. Where the two generations live in fairly close proximity and are on congenial terms, the parents have less need for substitute activities to replace the extended family functions.[3]

The consanguine family organization provides more continuity and security. The family which is primarily oriented around the conjugal pair is not the only form of family organization. Very common is a family where the central core is the relations of blood kin, of brothers and sisters, or of parents and offspring. The bond between these seems almost stronger than that between mates. It may be noted that the blood relationships have certain special ele-

[2] Paul Glick, *American Families* (New York: John Wiley & Sons, Inc., 1957).

[3] Marvin B. Sussman, "Family Continuity: Selective Factors Which Affect Relationships Between Families at Generational Levels," *Marriage and Family Living,* 16: 122–130, May 1954; "Activity Patterns of Post-Parental Couples and Their Relationship to Family Continuity," *Marriage and Family Living,* 17: 338–341, November 1955.



Photography by Esther Bubley



I. P. L. from Black Star

230 Two Types of Family

In all family systems, the core is the relationship between husband and wife and their offspring. Such a core, called the nuclear or conjugal family, is in societies like the United States an independent unit. In other places, the nuclear family is a subordinate part of a larger unit, the extended or consanguineous family, consisting of kinfolk, generally reckoned only through one family line. These two systems differ greatly in their consequences for family life. Shown here are a characteristic American nuclear family and a large Japanese household which is part of a still larger kinship group. The kinship system nearly everywhere tends to break down under the influence of industrialization.

ments of stability. The children have been brought up together since birth. They are a direct continuation of the same family and their number need not be limited to two. In other words, it is quite possible to think of the functioning family as organized around a center of blood ties, such as between brothers and sisters, or parent and children, rather than around husband and wife. Where the functioning group is based upon blood ties, it may be referred to as a consanguine family organization.[4]

There are, of course, marital groups in such a family, but they are subordinate to the blood group. The marital bond may be minimized to the point where one of the mates is not regarded as being related to the

[4] See Ralph Linton, *The Study of Man* (New York: Appleton-Century-Crofts, Inc., 1936), Chapter 10.

children. That is to say, a system of unilateral kinship generally obtains among primitives, descent being traced either through the mother's line or the father's, but not through both. A maternal consanguine family consists of a woman, her children of both sexes, the children of her daughters, of her daughters' daughters, and so on. The woman's husband does not belong to the group, but belongs instead to his mother's family. Where descent is patrilineal, the consanguine family consists of a patriarch, his children, and the children of his male descendants through males.

The marital tie is minimized among preliterates by the common practice of having one of the mates take up residence at the home of the other's people. In matrilineal societies, if the husband goes to live with his wife's family, the system is known as matrilocal residence; its opposite is patrilocal. All cultures which trace descent through males are apparently patrilocal. If descent is traced through females, the residence may be either matrilocal or patrilocal. Probably somewhat more than one-half of all societies are patrilocal, but the proportion is difficult to fix, for in some cases there may be a combination of practices or even a movement from one to the other.[5]

The consanguine family is strong where the husband comes from another village to live with his spouse and her people. To appreciate the significance of such a matrilocal family system it should be observed that the means of travel and communication are poorly developed among primitive peoples, and that their communities have the characteristics of isolated places today. When marriage occurs between members of two different villages, one of the persons is an outsider and his position in the household is much like that of a relative who comes to live with a married couple today; he becomes a part of the family but not the most essential part. In matrilocal marriages, the mother's brother sometimes bears a closer relation to the children than does the father, and it may be the uncle rather than the father who administers the punishment, if there be punishment to inflict. In some functioning households of primitive peoples the marital aspect of the family is not necessarily the most important factor.

The consanguineous and conjugal systems are not the only types of family organization. LePlay[6] has described the *famille-souche* or stem family, which is intermediate between the other two types and represents a transition from the consanguineous to the conjugal system. The stem family derives its name from an arrangement wherein the father and one son remain in the homestead, all the other offspring being supplied with the means of establishing independent households. The sons who leave home keep in close touch with the paternal family and contribute to its support if necessary; in case of the death of the heir, another son takes over, guaranteeing the continuity of the family headship. The system, which is found in western Europe, is an adjustment of large families to the small size of farms and is possible because of the availability of urban employment, and adequate communication and transportation facilities linking the family members. With increasing industrialization, the stem family tends to be superseded by the conjugal family.

Exogamy and Endogamy

The culture determines the classes of persons one may or may not marry. Why

[5] In a count of 250 representative cultures, historical and contemporary as well as primitive, 146 were patrilocal. So it is more often the wife who changes residence. George Peter Murdock, *Social Structure* (New York: The Macmillan Company, 1949).

[6] Frederic LePlay, *L'Organization de la Famille*, 1875. See commentary in Carle C. Zimmerman and Merle E. Frampton, *Family and Society* (New York: D. Van Nostrand Company, Inc., 1935), pp. 125–128.

is there among some peoples a prescription that they must marry outside their group — a practice known as exogamy? Its origin is not definitely known, but there are certain situations that make the system understandable. The practice of marrying outside the group is compatible with the prescription against incest which exists in every culture. Incest is, however, variously defined by different peoples. The marriage of mother and son is universally prohibited; and with rare exceptions, the same is true of the union of father and daughter. In a few cases, as in ancient Egypt, Peru, and Maya, brothers and sisters have been required to marry, but this occurs mainly among members of the ruling class when the idea prevails that they are divine or when it is desired to keep the blood pure. Such prescription of marriage within a particular group, or endogamy, may exist along with exogamy, as may be seen in the United States today in the case of state laws which forbid the marriage of first cousins (exogamy), yet require marriage with someone of the same race (endogamy).

The taboo against marriage of close relatives is sometimes extended so far as to forbid the marriage of members of the same clan. It should be recalled that when the material culture is very simple, the groups are quite small, sometimes numbering no more than twenty or thirty persons, and comprise only a few families. Among these peoples the system of kinship reckoning is not the same as ours. Lowie cites various systems of kinship reckoning:

> . . . in the Menomini family circle boys are not called "son" or "brother," but each is addressed by a word indicating the order of his birth. . . .
>
> In certain systems, blood-relatives are classed according to generation regardless of nearness of kinship and of their maternal or paternal affiliations. . . . [The Hawaiians] apply a single term, *makua*, to both parents and to all their parents' brothers and sisters, sex being distinguished only by qualifying words meaning "man" and "woman." All related individuals of one's generation are classed as brothers and sisters, certain distinctions being drawn according to the age of their parents relatively to that of one's own parents and also according to the speaker's sex, but none resulting from the differences in *nearness* of kinship. The children of all these brothers and sisters are classed with one's own children, and *their* children with one's grandchildren, while a single term embraces grandparents and all related members of their generation. This age-stratification of blood-relatives with disregard of differences as to father's or mother's side occurs not only in Hawaii, but also in New Zealand, Kusaie, the Gilbert and Marshall Islands.
>
> [The Zulu] man and woman call all the brother's and sister's children their sons and daughters without distinction, and the children of their father's sister are classed with one's brothers and sisters.[7]

Kinship may be extended to all the families who belong to the same group. As these bands grow larger the kinship terms persist, as does language in general, and all those in the enlarged group are designated as kin, although not necessarily related by blood. Such an expanded group constitutes a clan. Even today in China individuals who bear the same surname may not intermarry, although the original clan connection, if any, may be remote.

Norms of Marriage

Monogamy is the most widely practiced form of marriage. A distinction must be made between the preference in a society for one system as against another, and the ability of individuals in that society to exercise that preference. Strictly speaking, monogamy is a system that enjoins the marriage of one male and one female; in such a system no other arrangements are sanctioned. But monogamy is permitted in societies

[7] Robert H. Lowie, *Culture and Ethnology* (New York: Douglas C. McMurtrie, 1917), pp. 102, 109–111. By permission of Peter Smith.

where other systems are preferred. Where wives are bought, or where they are not of much economic value after marriage, most men cannot afford a number of wives. Thus, while the Koran permits a man to have four wives, few Mohammedans are able to avail themselves of this privilege. In Egypt, according to the census of 1947, those married to more than one wife were only 3.8 per cent of all married men; in Iraq, 9 per cent.[8] Monogamy becomes, of necessity, the most common arrangement even in a society which allows a husband to have more than one wife. Still, there are found among lower hunters a large number of strictly monogamous cultures, as in Pygmy tribes, even more often perhaps than among preliterate people with a higher development of hunting or agriculture, like the Hopi Indians. There is no reason to think that monogamy was not a very early development.

While monogamy is the most widely practiced form among preliterates, the most widely favored system is polygyny, the marriage of more than one female to one male. That this should be so seems curious to some observers, who point out that it runs counter to the approximate equality in number of the sexes. The sex ratio, which is about 100 females to 100 males at birth, may be disturbed by various situations, however. One of these is the hazardous life among hunters. The loss of life among males at adolescence leads to a slight excess of women. Among a small group of central Eskimos, for instance, there was a sex ratio among children of 105 males to 100 females, but among adults there were only 92 males to 100 females.[9] In 1805, among 23,000 Plains Indians in America, there were only 44 males to 100

[8] M. Kamel Nahas, "The Family in the Arab World," *Marriage and Family Living*, 16: 295, November 1954.

[9] Franz Boas, "The Central Eskimo," *Sixth Annual Report of the Bureau of Ethnology, 1884–1885* (Washington: Government Printing Office, 1888), p. 426.

231 A Polygynous Family

The interpretation of the picture below of a Moro husband and his seven wives is not so much biological as cultural. It is a matter of prestige, perhaps of riches or large land ownership, as well as of polygamy. Among the Moros, the ratio of women to men is not seven to one. (Photo by Ewing Galloway.)



females.[10] War in these early cultures is not as a rule costly enough in human life to have much influence on the sex ratio.

The sex ratio may be affected by other factors, such as the unequal migration of the sexes. The census sheets for three Southern Utah counties (Iron, Kane, and Washington) in 1870, when Utah was still a territory, show that of the white population, virtually all of which was Mormon, there were 956 females to 854 males twenty to forty-four years of age. Mormon polygyny was therefore consistent with the excess of women of marriageable ages and utilized the reproductive capacity of these women better than would otherwise have been the case.

Polygyny is a device for validating high status. While an excess of women would facilitate polygyny, it must not be thought that the system requires any such condition. As has repeatedly been shown, culture may distort what would seem to be a rational biological arrangement — in this case, monogamy. The strong men in a society do not necessarily respect the rights of the weaker. An extreme illustration of this is to be found in Australia, where older men appropriate many of the women of the community, forcing some of the younger men to go elsewhere for mates. It would seem that the natural desire of man for variety is asserting itself here, but this aspect is not of the greatest importance, since it is usually possible for primitives to enjoy an ample sex life without bearing the responsibilities of marriage. Additional wives are taken because they give a man prestige, much as do material possessions in our own society. The African kings had an unlimited number of wives. Wives are added, too, if they are economic assets. Polygyny is more prevalent on the higher economic levels where wives are very useful and where some men are richer than others.

Polyandry is very rare. Much more rare is the system of polyandry, the marriage of more than one male to one female. This plan is found among the Todas of southern India, where it takes either the fraternal or the non-fraternal form. In the first case, a group of brothers share a wife; in the second, the wife makes the rounds of the different settlements where her husbands live, spending a certain length of time with each. In the fraternal variety, if a child is born all the brothers may share the title of father, and the child will address them all by that name. In the other arrangement, some one husband will by an established ceremony be chosen as the child's legal father. It is interesting to note that, while biological paternity is not emphasized, legal or social paternity is.

It is easier to describe polyandry than to account for it. The system certainly runs counter to the tendency of the male to covet the exclusive possession of his mate. Among the Todas, polyandry is associated with female infanticide, which results in an excess of males, a reason which makes the system understandable. But it is doubtful that the practice of killing off a considerable number of female infants is the cause of the marriage arrangement. The Tibetans in the Himalayas also practice polyandry, but do not resort to infanticide. The chief factors responsible for polyandry would seem to be the extreme poverty of the people and the small economic utility of women in the culture.

Group marriage is practically nonexistent. Some writers mention group marriage as a fourth system, but it may be questioned whether a real instance of it can be established. It may have existed at one time in the Marquesas Islands, but it is not practiced there now. Where it occurs it seems to be a temporary or transitional ar-

[10] Clark Wissler, "Changes in Population Profiles Among the Northern Plains Indians," *Anthropological Papers . . .* (New York: The American Museum of Natural History, 1936), Vol. 36, Part I, p. 43.

rangement. The Indian government has lately sought to suppress female infanticide among the Todas, with the result that an equality in the numbers of the sexes is being established. Consequently brothers may now take collectively a number of wives. But this would seem to be a makeshift arrangement pending the completion of the process of readjustment to new conditions. Group marriage, in the very nature of the case, offers no real advantage.

Group marriage is to be distinguished from promiscuity, for it proceeds under community sanction and control. Sexual license among married preliterates is seldom found in any disorganized sense, although it is quite common among young unmarried persons. Wife-lending by agreement, or exchange of partners, is sometimes allowed, but such practices are not disruptive forces and occur usually under special conditions. Even where variety and experimentation are permitted, there is an orderliness of family life.

The Status of Women

An excess of women and polygyny may mean an inferior position of women in the family, but not necessarily so. Indeed, a man's first wife may request him to take a second wife to help with the work. Also in polygynous families the wives may band together in an argument with the husband and thus lend strength to their position. Among the Mormons, before polygyny was formally abolished in 1896, only polygamists could hold church office; and the wives of such leaders enjoyed special social distinction.

The fact that a man marries to get more labor and that there is a practice of purchasing a wife suggests the idea that women may be considered property. Such is hardly the case, however, for though wives may be bought, they are never sold. Wife purchase is not quite the same thing as a horse trade, but is more closely related to the system of gifts. In a primitive culture a father may get property when a daughter marries, but he may give property when his son marries. Property considerations often enter into marriage, especially where the family performs economic functions of some magnitude. The whole system affects also the stability of marriage, since in certain cases of separation there may be a return of property. Marriage is more stable where there are such property considerations. Even today in the United States and western Europe marriage often involves gifts, dowries, and property settlements.

The position of women in families usually depends to a considerable extent on the economic functions they perform. In a horticultural society the work is in good part done by the women and their status is relatively high. However, in herding cattle or in managing large animals, domesticated or wild, men have a very essential economic assignment, and their position is as a rule relatively higher than that of women. The husband is more likely to go to live with his wife's people in a hoe culture, while a woman is more likely to live with her husband's people in a cattle culture. These correlations are not perfect, for various other factors may modify such a relationship between cultural traits in a given area. Moreover, it should be remembered that there is considerable difference in theory and practice regarding woman's rank. It is well to note that theory is often an idealized statement, and that in reality there is in every society a great deal of individual variation. Some women have more dominant personalities than men, as truly in preliterate culture as in modern, regardless of whether in theory sovereignty rests with the male.

Divorce in Primitive Culture

Among preliterates there is considerable variation in the degree of marital stability.



232 Status of Navaho Women

From the perspective of Western white society, where women are extended certain small courtesies and deferences, this photograph showing a Navaho squaw on foot following her mounted husband across the Arizona desert suggests an inferior status for Navaho women. But it is erroneous to use clues from one culture in interpreting another. The Navaho own horses individually and have no conception of joint property. Which spouse walks depends on which one has a horse available. While the husband is formally the head of the family, the prevailing pattern of residence is with the wife's people, the women have most authority within the home (hogan), and descent is traced through the mother. In case of danger, as in former times, it is well to have the man in front. (From the *Los Angeles Times News Bureau.*)

Some of the simpler hunting peoples, as for instance the Veddas of Ceylon, do not allow divorce at all. In general, however, marriage is more flexible, and separation and remarriage are permitted. When divorce is frequent, the breaking and forming of new families is more likely to occur among the younger adults. No statistics have been collected on this point, but ethnological field workers observe more stable marital unions among the older families in a culture where divorce may be common among the younger members. The divorce procedure itself is likely to be very simple. A Zuni wife who no longer wishes to keep her husband indicates her decision by placing his personal belongings at the entrance of the house; when he returns from work and sees his things, he takes the cue and returns to his parents' home. In the case of a consanguine family, like that of the Zuni, divorce is not serious in its effects on the children, since the larger family organization remains intact and the children continue to have the influence and association of the other adult members of the group. For this reason and others, divorce is probably more common among preliterates than it is in modern society. An estimate of divorce rates in forty societies, eight each from Asia, Oceania, Africa, and native North and South America, indicates that twenty-four had rates exceed-

ing that in the United States.[11] If a husband is lazy and will not support his family, the community will not object to his wife's separating from him; such a man may find it difficult to contract another marriage. While divorce is made easy, it is not encouraged, for divorce always disturbs some important family functions. The more numerous and significant the social and economic functions of the family, the more serious becomes the disruption of marriage.

THE FAMILY IN THE HOUSEHOLD ECONOMY

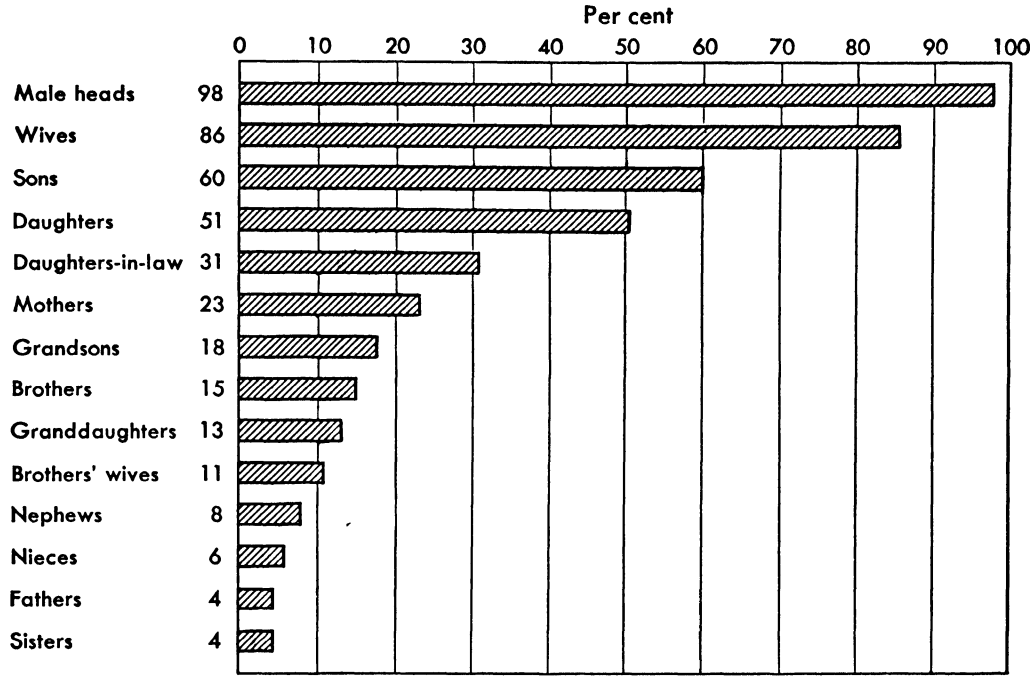
As plow culture replaced hoe culture and cattle were kept on the farm, the role of the husband became quite important in the family economy and he seldom went to live at the home of his bride. Mates were now chosen more often from among the boys and girls of the same community. The community was larger in the plow culture; there was more opportunity for choice without incest. The young couple set up a home in the same village from which they both came, or the bride went to live in the home of her husband. The family took on the pattern found in historical Europe and colonial America.

The economic functions of the family became more prominent. Under the plow and cattle culture the economic functions of production seem to have been suited fairly well to the conjugal family. The system gave rise to a highly developed household economy which existed in Europe through the Middle Ages into the nineteenth century. The same type of family is also found widely distributed in Asia. This household economy was developed chiefly in villages around which agriculture was practiced, or in the open country where the farms were scattered, for only a very small percentage of the population lived in cities. Most of the economic functions had been exercised by the family during the period of the hunting cultures and also in the horticultural period, but the standard of living was not very high. With the advent of the plow and the domestication of cattle the various handicrafts became much more highly developed, and the economic functions assumed an even more important role in family organization. Under the household economy the producers were the consumers of their own produce, buying from other producers only a few things such as metal wares, swords, lances, gunpowder, silks, glass, and other luxuries. Such things as the grinding of grain, preparation of soap, molding of pottery, fabrication of leather, construction of furniture, and concoction of medicines were done at the homestead by members of the household. These families were thus largely self-supporting.

In developing a variety of important economic activities, the household had become a significant business enterprise. The wife was like a business partner; and if she was industrious, thrifty, and a good manager, a man would be loath to lose such an economic asset. It might be difficult to secure another, and it was almost impossible for a man to run a household without the help of a woman. If a wife were put aside by her husband, she would return to her family or marry again, for there were no occupations for her to follow outside the family organization. The effect of the exercise of these economic functions was to make the marital relationship stable.

Farming encourages large families. It is natural to think of a farm as being run by a family. The size of the farm is very well fitted to the size of the family. If the size of the family determined the size of the farm, there could never be a very great in-

[11] G. P. Murdock, "Family Stability in Non-European Cultures," *The Annals of the American Academy of Political and Social Science*, 272: 195–201, November 1950.

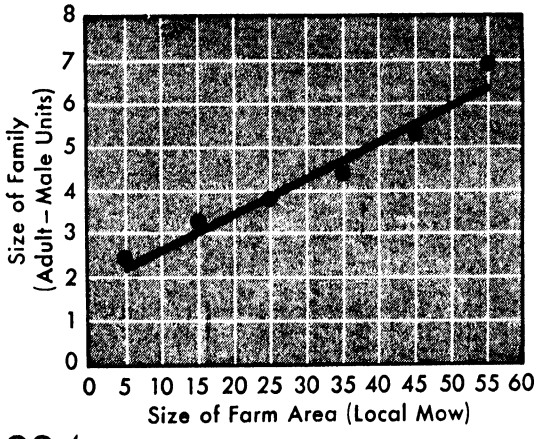


233 Composition of Chinese Rural Families

The proportion of all families having, as part of the household, certain specified relatives of the male head (2,640 families in seven Chinese provinces, 1921–25). Where the family is still in large part the unit of economic production, there is often a great demand for the kin to remain within the household. The Chinese measure their families laterally as well as vertically. (Redrawn from John L. Buck, *Chinese Farm Economy*, Chicago, The University of Chicago Press, 1930, p. 320.)

equality in the distribution of wealth. But there are ways whereby a wealthy farmer can have more land than a single family can cultivate. One way is to rent land to tenants, another is to own slaves. In the Middle Ages, the rich lord had serfs. Nowadays a farmer hires labor and acquires more machines. These different social arrangements call for some inventions, such as serfdom, slavery, or wage systems. Failing these, or in company with them, the family tries to stretch its size to enable it to till more land. This is true to a certain extent for the sharecropper in the cotton belt of the South today. A large number of children is the most natural way to achieve this result. Abraham, a rich farmer in Biblical times, was in favor of large families. But the family may also be augmented by keeping the married sons at home and bringing in daughters-in-law, and even their relatives. The family may expand laterally, which is the custom in China. In Europe and America, we are more familiar with the vertical expansion: grandparents, parents, children, grandchildren, and great grandchildren, referred to in ancient law as the five-generation kindred.

Figure 233 shows how the kin are kept in the family in rural China. These data are based on 2,640 farm families in seven different provinces. The average size of the family is 5.67 persons, but there are some very large families. In the sample, 49 families had 11 persons each; 22 had 13; 18 had 14. There was one family with 27 persons; one with 28; and one with 29. How the size of



234 Relation of Size of Farm and Size of Family in China

Where wealth is measured in farm land, one way of obtaining the necessary labor is to increase the size of the family. Note the remarkably close adjustment of size of farm to size of family in this particular locality in China. (Redrawn from John L. Buck, *Chinese Farm Economy*, Chicago, The University of Chicago Press, 1930, p. 334.)

the family and the size of the farm are correlated is shown by Figure 234, based on 217 families in one province of China.

Under the influence of farming, the size of the family increased over what it had been in the hunting culture. In the subsequent industrial society, families on farms have been generally larger than families in cities. Only in the pre-industrial cities, where the proportion of the population was only a small fraction of the total population of the society, were families in general bigger than in rural areas.[12]

Affection played a subordinate role in the choice of a mate. In the household economy, contracting a marriage meant an emphasis on its economic aspects, that is, on property settlements and on the work habits and skills of the prospective mates. A man looked for a good housekeeper and a woman for a capable provider.

[12] Gideon Sjoberg, "Familial Organization in the Preindustrial City," *Marriage and Family Living*, 18: 30–36, February 1956.

The fact that a man would choose a bride primarily on the basis of economic factors seems strange in a day when romantic love is taught by the movies and the pulp magazines to be the sole basis for the choice of a mate. For an agricultural handicraft economy such as existed in Biblical times, the virtues of a good wife are set forth in the following chapter from the Book of Proverbs:

> Who can find a virtuous woman? for her price is far above rubies. . . .
>
> She seeketh wool, and flax, and worketh willingly with her hands.
>
> She is like the merchants' ships; she bringeth her food from afar.
>
> She riseth also while it is yet night, and giveth meat to her household, and a portion to her maidens.
>
> She considereth a field, and buyeth it: with the fruit of her hands she planteth a vineyard.
>
> She girdeth her loins with strength, and strengtheneth her arms.
>
> She perceiveth that her merchandise is good: her candle goeth not out by night.
>
> She layeth her hands to the spindle, and her hands hold the distaff.
>
> She stretcheth out her hand to the poor; yea, she reacheth forth her hands to the needy.
>
> She is not afraid of the snow for her household: for all her household are clothed with scarlet.
>
> She maketh herself coverings of tapestry; her clothing is silk and purple.
>
> Her husband is known at the gates, when he sitteth among the elders of the land.
>
> She maketh fine linen, and selleth it; and delivereth girdles unto the merchant.
>
> Strength and honor are her clothing; and she shall rejoice in time to come.
>
> She openeth her mouth with wisdom; and in her tongue is the law of kindness.
>
> She looketh well to the ways of her household, and eateth not the bread of idleness.
>
> Her children arise up, and call her blessed; her husband also, and he praiseth her. . . .[13]

[13] *Proverbs*, 31: 10–31.

A good marriage was thought to be one in which the capabilities of the young couple were high, rather than one where the love element was strong. While love was regarded as a desirable factor, it was considered not important enough to be the sole basis for marriage. It was assumed that after marriage affection and congeniality would develop to the degree that they are found in later married life in marriages contracted on the basis of romance. Where marriages were arranged by parents, however, the wishes of the young pair were usually ascertained and respected.

While polygamy does not seem to be incompatible with such a system of marriage, and indeed might have been an economic asset, monogamy became more prevalent in agricultural families, and in great areas polygamy disappeared. The blood of the mother was considered equal to that of the father in creating the child, and kinship was reckoned on both sides. Recently when the habit of using two names developed, the surname was taken from the father.

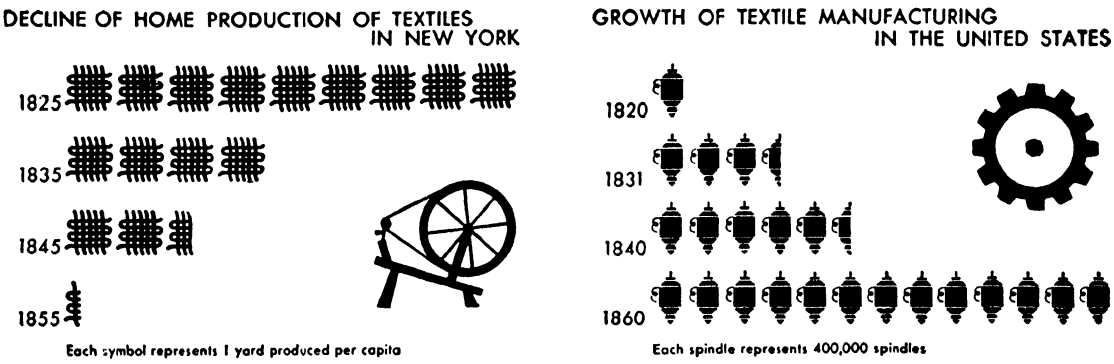
The individual was subordinated to the family. When families are centers of affection between mates, parents, and children; when they are the greatest agency in society for the economic functions; and where families become attached to so stable a property as land, it seems natural that the family reputation should be very significant in determining status. The family name becomes important for business and for property arrangements, and wealth is associated with the family and household rather than with the individual. The belief in the biological inheritance of social gifts and graces is another factor that tends to accentuate the family name. The status of the family may become so important that eventually it overshadows the individual member, who tends to be identified as, say, some family's son or daughter, not as a personality in his or her own right.

The home became the central social unit. Another observation concerns the importance of family life itself in agricultural societies. The villages in which most families lived were small, and there were few other houses than those occupied by families. Accordingly, the home tended to become the center of various kinds of activities: social, educational, recreational, and even religious. Churches were sometimes built, but there were no factories, stores, or offices. Only occasionally was there a clubhouse. By comparison with these other agencies the home ranked as a very important institution. While community undertakings might compete with activities centered in the home, even then the participation was usually on a family rather than on an individual basis.

MODERN URBAN FAMILY

The consanguine family declines. The consanguine family and the clan tended to break up in the course of time as the local group became larger and as better methods of transportation were adopted. The consanguine family tended to disappear, especially in the Western world, and the conjugal family became the predominant type. In the United States, 96 per cent of all married couples in 1954 maintained separate households. In the early pre-industrial cities, the extended families continued, mainly among the small upper class; but in the twentieth century, as industrialization proceeds in formerly agrarian societies like China and India, the family of kinfolk is giving way to the small independent family.

As villages on the water highways grew into cities, the situation was not quite the same for the family. The city family was not identified with the land and subsistence production, as was the agricultural family. The city family tended to specialize in such undertakings as blacksmithing, making



235 Economic Production Leaves the Home

The departure of economic production from the family has led to the growth of cities, the proliferation of complex economic institutions, and a socialistic trend in government. (From Casner, Garner, and Gabriel, *The Rise of American Democracy*. New York: Harcourt, Brace and Company. Courtesy of Pictorial Statistics, Inc.)

wheels, and weaving cloth. There was need for labor in such undertakings, but not so much for family labor as for individual labor. The system of apprenticeship enabled a family to draw young labor from other families. Later, wages were paid. The work was done in the household; the wife's duties were still housekeeping. The early city family was based upon the agricultural family with some modifications.

The transfer of economic production from the home. Industrial organization using inanimate power eventually outgrew the family. The trend was in this direction as the inventions used in handicrafts manufacture multiplied and the use of windmills increased. But with cheaper iron and steel, and with the use of steam as a source of power applied to tools, more space was needed and more workers were required than were to be found in the household. The steam boiler was too big for the home and the power generated required more space for the machinery. The factory instead of the homestead became the unit of production. The factory was too large to be manned by even a very large family. Steam was first applied to spinning and weaving. But even before that, many types of production had left the average family, such as the tanning of leather, furniture-making, and the fabrication of cooking utensils and work tools of metals.

The process of the transfer of economic functions from the urban family to outside agencies has gone quite far in the past century and has left now chiefly cooking, the care of the house, laundering, and some sewing in the urban family. Even portions of the latter functions have been transferred, as for instance baking of bread to the bakery, cooking of lunches to restaurants and soda fountains, some laundering to outside laundries, and much sewing to various types of factories. Foods are processed outside the home, which facilitates the preparation of meals. The transfer process is not yet finished. Men's functions were among the first to leave the homestead as farming was given up. Women's more varied household duties have been transferred more slowly.

In the agricultural family the process has not gone so far. The extent to which economic functions are retained here may be measured by the amount of subsistence farming which is done. Where the money crop is large, more goods are bought that

are produced elsewhere, presumably for the most part in factories and similar establishments.

The family has been getting smaller. One important result of this change has been a diminution in the size of the household. The family is now shaped more closely than ever before around the marital pair. The economic activities of the family no longer require the assistance of relatives and married children, hence there is no longer any economic need for their presence in the household. Two-thirds of families in the United States (1948) had no adult relatives (18 years old or over, other than the head or his wife) living with them. Nearly one-half had no sons or daughters under 18 years of age living with them.

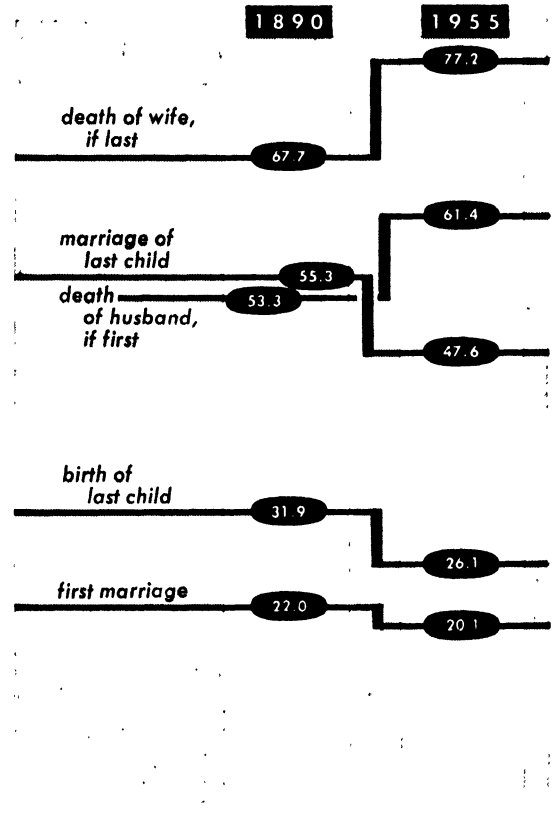
Moreover, the biological family itself is contracting in size. This may be inferred from Figure 236 comparing the stages in the family cycle in 1890 and 1950. Fifty years ago the average bride and groom were a little older than the newlyweds today, but they had more children, an average of 5.4 as compared with 2.35. Relatively twice as many married women in 1950 as in 1890 completed their period of fertility without bearing any children at all.[14]

The affectional function has become more prominent. With the parental function being reduced by birth control, the years spent in rearing children are fewer. Many of the economic functions have been transferred to establishments outside the family so that the economic functions left are few. The same is true of the educational, religious, and protective functions; the prevalence of schools, churches, and governmental agencies attests to this. As a consequence, the function of providing affection between the mates has become relatively more prominent.

In the light of the foregoing, it is to be expected that in marriage today the affectional element would be greatly emphasized. No doubt the romantic side is emphasized also because of the postponement of marriage by many young men and women to a point beyond that found among primitive peoples generally. The fact that the cultural age for marriage occurs much later

236 Stages in the Family Cycle in the United States

Increased longevity and decreased fertility of couples mean that more husbands and wives have to adjust to the empty nest. In 1890 the death of the father usually occurred about two years before the last child married and left home. In 1950 the average couple had nearly 14 years together after the last child married. (Adapted from Paul C. Glick, "The Life Cycle of the Family," *Marriage and Family Living*, 17: 3–9, February 1955.)



[14] For discussion of the rise in the birth rate since 1940, see Chapter 15.

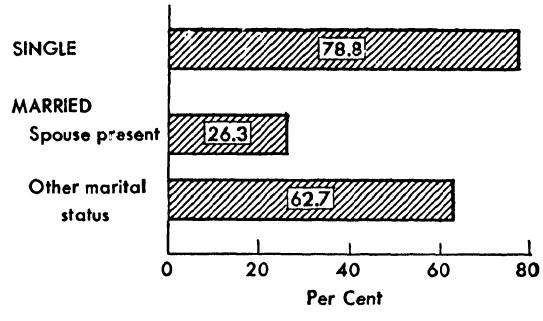
than the biological age serves to stimulate the love emphasis. It seems to be agreed that nowhere in the world has romantic love been so emphasized in starting marriages as in the United States today, although since 1890 the age of marriage has been decreasing.

In addition to stressing the personality relationships of husband and wife, the small-family system emphasizes the rearing of the young children. To be sure, the educational function of the family has, in part, been shifted to the state through the creation of the public schools and the passage of compulsory school attendance laws. Yet the very early years are spent almost exclusively in the family; and even when the children are of school age, there are many ways in which the family supplements the contribution of the school.

The reduction in the size of the family means a smaller proportion of middle children in the population and an increase in the percentages of oldest and only children. The reduction in the number of brothers and sisters in a family means also that children will spend more time with adults and less with playmates, with attendant consequences for personality unless counteracting measures are taken. As modern research is showing that the basic personality structure of the child is dependent upon the way the early years are spent, the responsibility placed on the parents seems to be very great. Clearly the personality functions of the modern family are among its most important ones.

These intimate functions are seriously affected by the mobility of the population, which is greatest among the lower economic strata. The average family in a very large city moves approximately every two years, and tenant farmers also move quite frequently. This means that parents and children must find new primary groups. Frequent moving "de-groups" the members of the family somewhat, so that they do not seem to belong to any group. This condition, while of some consequence to the parents, is even more serious for the uprooted children. Indeed, in some cases children are deprived of vital social contacts not only in the community but in their own homes as well. The occupational situation of many fathers is such as to require, if not actual travel away from home, then at least a good deal of commuting between home and place of employment. In such families, the children, especially when they are little, are often denied much contact with their fathers.

Roles in the modern family: the trend toward equalitarianism. The new conditions have also worked to change the roles and status of husband and wife in the marriage relationship. In an agricultural society, as was pointed out, the family is a business organization. Like all businesses, the farm family needs a head. Man generally assumes the leadership, since his services are more



237 The Married and Unmarried Women at Work

Percentage of women in the labor force of different marital status, 25–34 years old, United States, 1954. Usually a woman works for pay before marriage, depends upon her husband for economic support during marriage, and may return to the labor force if the marriage is terminated by death or divorce. (Data from *Statistical Abstract of the United States*, 1955, p. 195. The category "other marital status" includes the widowed, divorced, and those married but separated from their spouses.)

important from a business point of view. Besides, the economic leadership of women is disturbed by the fact that they bear and rear the children. In the modern city, on the other hand, the economic functions of the family are less significant and, accordingly, the need for leadership and control is not so great. Wives may work outside the home for pay. In 1955 in the United States better than one in four married women was so employed. In a farming economy, a wife is an unpaid family worker who depends on her husband for economic support. Before the opening of the factories in the early nineteenth-century, there were only three occupations open to women: teaching, needlework, and keeping boarding houses or hotels. In the 1950's in the United States, practically all of the 451 classifications of jobs listed by the Bureau of the Census are open to women. The availability to women of jobs which are independent of their family and which provide a money income encourages a relationship of greater equality between the sexes.

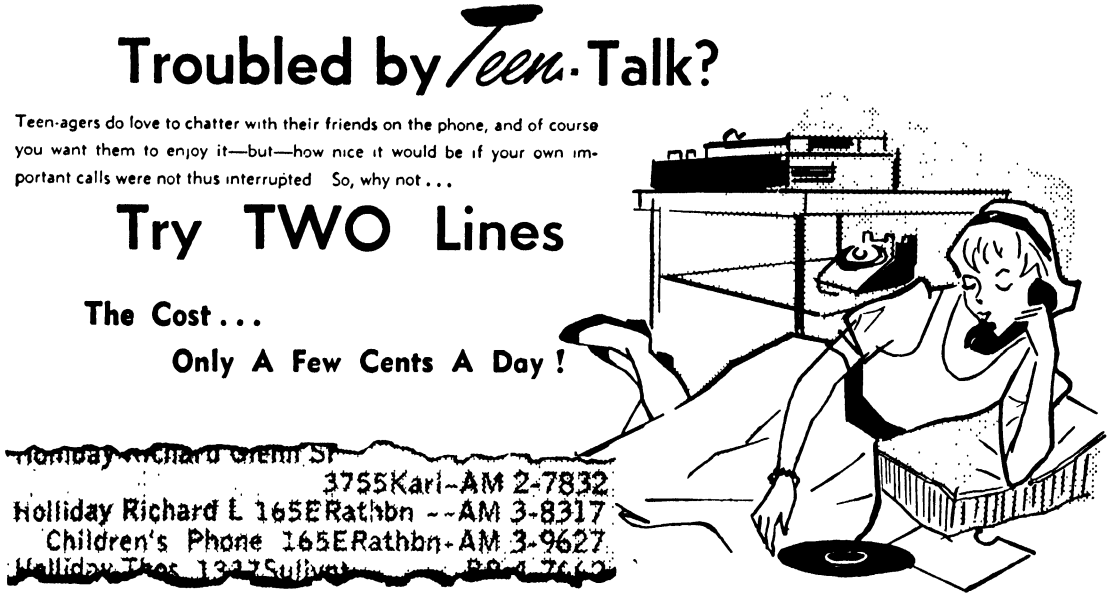
In spite of the persistent lag in the laws discriminating against women, there has been a substantial modification of the former patriarchal control. A century ago, a married woman could not sue alone; she could not execute a deed without the concurrence of her husband. In many respects she lost at marriage the power of personal independence and altogether that of separate action in legal matters. She lost the entire control of her personal property as long as the marriage continued. The personal property of the wife went to her husband at marriage to dispose of as he pleased. He also had the right to control her real property and to take the profit from it. Today in thirty-one states of the United States husbands and wives have an equal interest in each other's real estate. An unmarried woman can make a contract in twenty two states. In thirty-nine states the right of fathers to sole guardianship of their children has been changed. Women have the vote, serve on juries, have protection against exploitation in industries. They can go to college and some can become lawyers and doctors. They have associations and clubs of their own. The family was the unit under the old system and man was the head. Now the members of the family tend to be individuals before the law, and custom is giving women many rights. The status of children has also risen, as suggested by Figure 238.

Table 39 · Percentage Distribution of Marked Paternal or Maternal Authority, by Social Class, Cologne, Germany, 1955*

SOCIAL CLASS	TYPE OF AUTHORITY	
	Paternal	Maternal
Upper class	53	0
Upper-middle	30	16
Middle-middle	25	10
Lower-middle	8	34
Upper-lower	19	32
Lower-lower	25	29

*René König, "Family and Authority: The German Father in 1955," *The Sociological Review*, Vol. 5, No. 1 (New Series), July, 1957, pp. 123–124. Keele: University College of North Staffordshire.

In the cities in Western industrial society, patriarchalism in the classical sense appears to survive mainly in the upper classes. This is indicated by the findings given in Table 39 showing the proportion of families by social class with pronounced paternal or maternal authority in Cologne, Germany, in 1955. It will be seen from these data that the usual pattern of domestic power is equalitarian, except for the upper class, where a bare majority of the families showed a paternal power structure. A possible explanation is that the large holdings or estates of the very rich call for concentration of authority in the interests of management, as in the plow culture.



238 **Accent on Children**

The advertisement shown above is adapted from one by the Southeastern Telephone Company and the listing is from the Columbus, Ohio, telephone directory. The Tallahassee, Florida, directory (1956) shows a similar listing for the Governor of Florida and his children. The practice, although limited by economic costs, suggests the high status of children in the United States in the middle of the twentieth century, very different from the situation in colonial times when it was said that a child should be seen and not heard.

Role conflicts in marriage as sources of discord. The changes in the roles of men and women precipitated by modern industrialization and urbanization have not occurred uniformly. There are still many who believe that woman's proper place is in the home and not in the labor force, especially if she is married and has a husband who can support her. In a recent survey [15] of high school students in Gainesville and Hall County, Georgia, most of the girls indicated that they expected to work after marriage, and most of the boys stated that they disapproved of working wives. Although there is more unreality in the boys' than in the girls' responses, and experience will doubtless bring some changes in viewpoint, the differences are so great as to indicate potential difficulty on this score in the years ahead. When husbands and wives grow up together in a stable society, where roles are clearly defined, they are likely to come to marriage agreed on what each expects of the other. In a changing society there is greater likelihood of disagreement. A husband with traditional orientation, possibly because his mother played a predominantly if not exclusively domestic role, envisions his wife doing the same, whereas a husband with a progressive or developmental viewpoint can see his wife in a non-domestic as well as a domestic role. Changes have occurred in many family roles other than the

[15] Raymond Payne, "Adolescents' Attitudes Toward the Working Wife," *Marriage and Family Living*, 18: 345–348, November 1956.

occupational one, including the religious, educational, recreational, political, and sexual.

Modern Divorce

Role conflicts in marriage produce discord and lessen affection. Divorced couples hold more divergent conceptions of the roles of husbands and wives than do married couples.[16] Formerly the family was held together by many different bonds — economic, religious, protective, and the like. These ties are still present but in modified and weakened form, and the family depends for its integration mainly on the affectional tie. All things equal, one bond does not hold as firmly as several. With the weakened bonds, the family falls apart more often, and there is more divorce. One theory of why there has been an increase in divorce is that there has been an increase in role conflicts, leading to more unhappiness. Another theory is that, whether there has been an increase in marital unhappiness or not, the decrease in family functions means there are fewer restraints or ties. The increase in divorce in the last half century or so has been widespread and sharp, as shown in Figure 240.

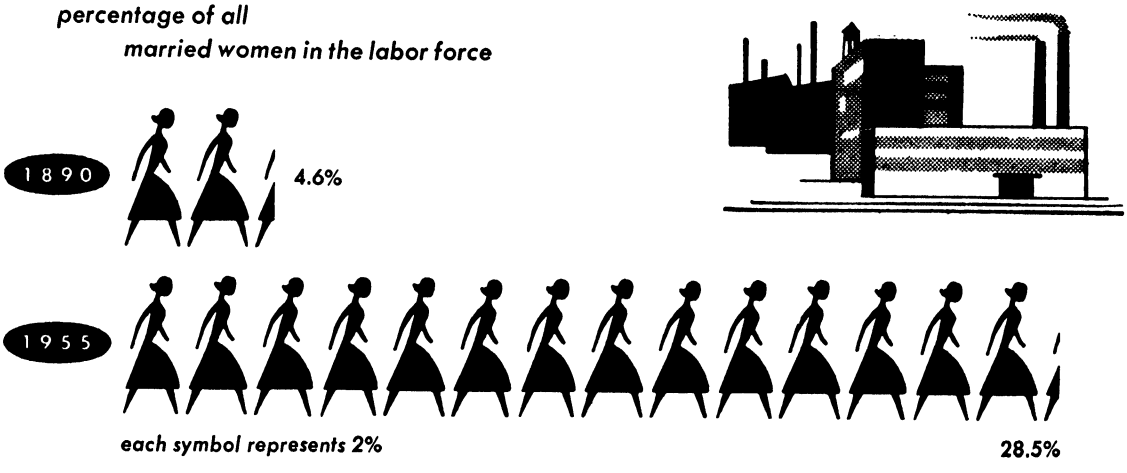
The affectional bond is often very strong at the inception of marriage, but it does not always endure. When it breaks, married couples tend to separate from each other. Yet observation suggests that all discordant couples do not separate. Some remain together in spite of their difficulty. In a word, while dissatisfaction with marriage is obviously the fundamental cause of separation and divorce, the process is facilitated or hindered by other factors, several of which may be indicated.

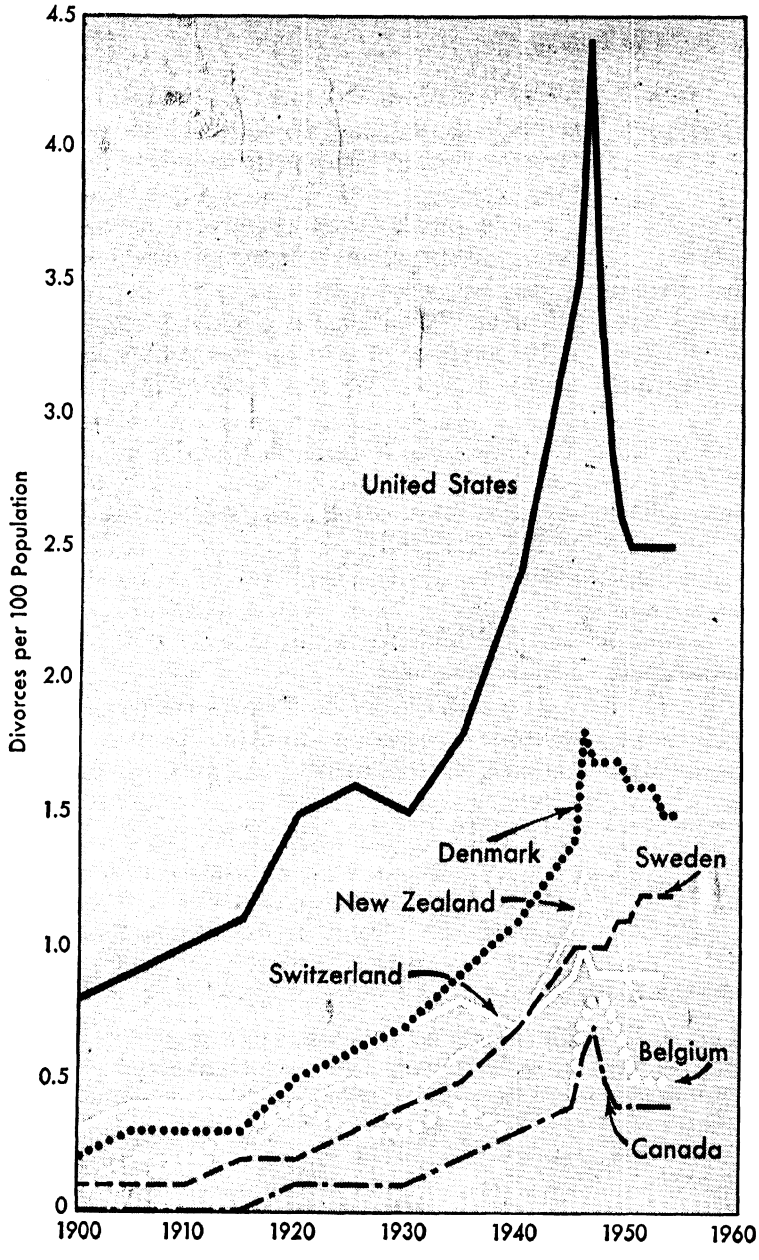
Two such factors affecting the stability of marriage are the age, and the number of children, of the married pair. Most marital disruption occurs among those who have been wed a relatively short time. Two-thirds of all divorces go to those who have been married less than ten years. This is to be expected, since youth is the mating time,

[16] A. H. Jacobson, "Conflict of Attitudes Toward the Roles of the Husband and Wife in Marriage," *American Sociological Review*, 17: 146–150, April 1952.

239 Changing Roles in Modern Society

The percentage of married women in the United States in the labor force, 1890–1955. Woman's place was once in the home; but it is rapidly becoming less so, with important consequences to the personality of women, sex mores, education, and citizenship.





240 The Worldwide Increase in Divorce

Since the increase in the divorce rate is not limited to the United States but has been worldwide, it seems probable that a set of common factors is involved. Under the influence of increasing industrialization and urbanization, the family in many different lands has lost traditional functions, notably those of economic production and protection, which helped greatly to hold the members of the family together. There may now be more affection between mates than in former times, but affection is often less enduring than economic interdependence was in former times.

and the chances of remarriage are greater, especially for the female. Married couples are held together by children, although probably less so than is popularly supposed. In Iowa (1951–52), half of all divorces were granted to couples without minor children and nearly an additional one-fourth to couples with only one minor child,[17] but this is mainly because divorces are concentrated in the early years of marriage before there is much childbearing. If it were possible to hold duration of marriage constant and to allow for separations as well as divorces, the relationship between family disruption and childlessness would probably not be striking.

[17] Thomas P. Monahan, "Is Childlessness Related to Family Stability?" *American Sociological Review*, 20: 446–456, August 1955.

In recent decades, the number of children affected by divorce has risen more rapidly than the number of divorces. Also the number of children does not affect the speed with which a divorcee remarries.[18] If these trends continue, children may not be so great a deterrent to divorce in the future as in the past.

Another factor affecting the stability of marriage is the type of community in which the family lives. In cities the divorce rate is much higher than in rural regions. This condition is due in part to the fact that in small places the inhabitants are personally acquainted and see each other face to face often during the week. The opportunity for the opinion of others to play a part in regulating a person's conduct is much greater in such a primary group than in a city, where there is much more chance of anonymity and freedom from the social pressure that centers around Main Street. Moreover, on farms women are an economic asset, adding to the production, and their economic value is utilizable directly in the family. Marriage is more prevalent in farming districts and divorce less common. Though the city woman who works for pay outside the home is an economic asset as truly as is the farmer's wife, her economic activity is independent of the family life, and her economic situation may even favor separation.

Finally, mention may be made of religion as a factor influencing the stability of the family. Some religions permit separation but not divorce, forbidding a second marriage. Other churches deplore the breaking of the marriage tie, but condone it under a variety of circumstances. The stability of marriage is often affected by the sensitiveness of the individuals to the opinion of their church. The church attitude itself, however, is affected by the various social forces that are changing the family.

[18] William J. Goode, *After Divorce* (Glencoe, Ill.: The Free Press, 1955).

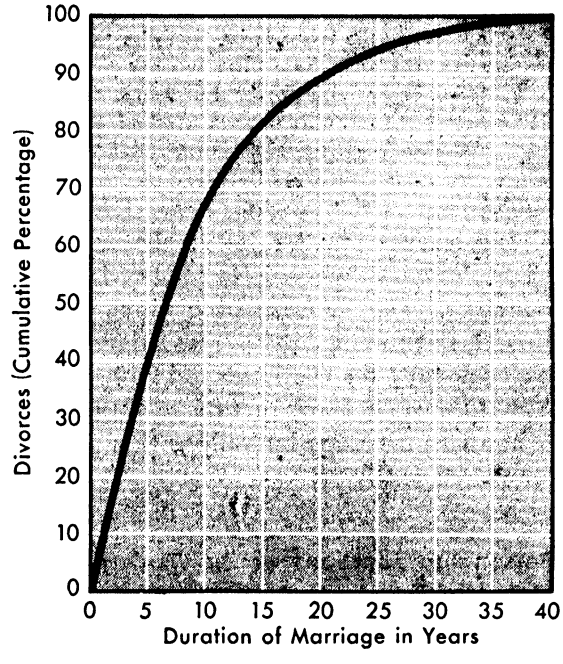
An interesting recent trend is the increase in the rate of remarriage of divorced persons. About three-fourths of persons getting a divorce between 1943 and 1948 had remarried by 1948, and for those divorced in the period 1934–43 about six-sevenths had remarried.[19] Also the proportion of remarried women among those previously widowed or divorced was about one-sixth greater in 1940 than in 1910.[20] The gains were espe-

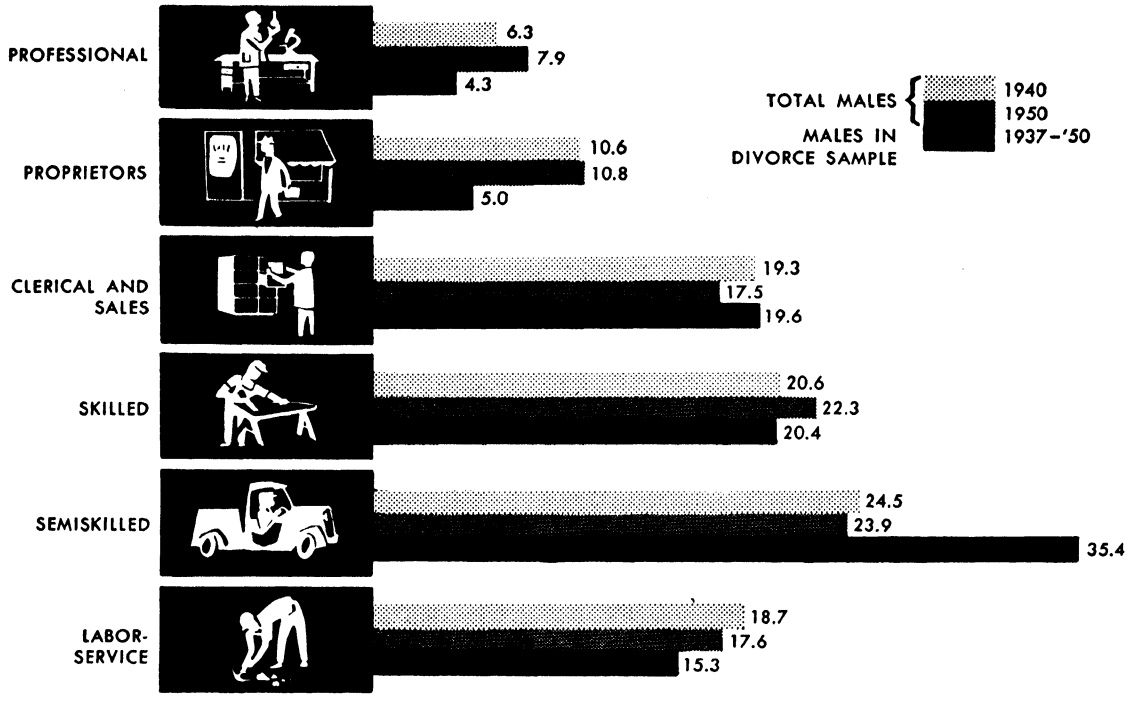
[19] Paul Glick, "First Marriages and Remarriages," *American Sociological Review*, 14: 730, December 1949.

[20] Metropolitan Life Insurance Company, "The Frequency of Remarriage," *Statistical Bulletin*, January 1949, p. 8.

241 Divorce by Duration of Marriage

The curve above shows the cumulative percentage, by number of years married, of the 135,178 divorces recorded in 22 states in 1955. One-fourth of the divorces occurred within the first 3 years of marriage, and three-fourths within the first 12 years. Youth is the time for mating and, if need be, re-mating. (Data from U.S. Department of Health, Education, and Welfare, *Divorces and Annulments: Detailed Statistics for Reporting Areas, 1955,* Table 5.)





242 Divorce by Occupational Level

The numbers at the ends of the black bars show the percentages of a sample of 1,434 Philadelphia divorces, 1937–50, whose occupational class is shown at the left of the chart. Thus 5 per cent of the 1,434 divorces were granted to proprietors. But we need to know the percentage of the proprietors in the total labor force. This percentage is shown for 1950 by the number at the end of the gray bar, 10.8; and, for 1940, by 10.6 at the end of the light bar. The proprietors thus had fewer divorces than they would have had, if divorces had been granted them in proportion to their number in the labor force. Likewise the professions had fewer divorces. But the semi-skilled had more than their share. The percentages for the remaining classes were the same as their representation in the labor force. The dictum that desertion is the poor man's divorce is not supported by recent studies. (Data from William M. Kephart, "Occupational Level and Marital Disruption," *American Sociological Review*, 20: 456–65, August 1955.)

cially great at the younger ages. Divorce is always a serious matter, but its disorganizing effects are less when it is followed by remarriage. The increase in divorce is publicized, but the increase in remarriage is less well known. Yet the latter is highly significant, because it shows that the dissatisfaction is not with marriage but only with a particular marriage.

Personality Functions of the Modern Family

With the loss of traditional economic and other functions, the personality functions loom large. These are of two types. One has to do with the relations of husbands and wives and the other with the relations of parents and children. There is at present much concern with the questions of how husbands and wives get along with each other, and of how parents affect the personality of their young. These relationships are further described by saying that the concern of mates with each other is one of happiness, and the concern of parents with children is education in its broadest sense. This statement unduly simplifies the anal-

ysis, for the family still has some economic, religious, protective, and recreational functions. But the statement does correctly point the direction in which the trends have been moving. The major problems of the present-day family are (1) to make happy husbands and wives, and (2) to produce wise parents who will provide a happy and wholesome childhood for their young.

Factors in Married Life Producing Unhappiness

The folklore on unhappiness in marriage rates mothers-in-law and "bad habits" as important sources of difficulty. Marital advisers usually counsel neatness in appearance, consideration for the wishes of others, and taking interest in the same things. The list might be extended to great length. The divorce laws usually recognize adultery, desertion, drunkenness, insanity, conviction of felony, neglect to provide, and mental cruelty as legitimate causes for divorce.

From these general observations we may turn to the more specific findings of systematic investigation. Terman has listed thirty-five grievances of which complaint is commonly made in marriage. These complaints he has ranked in order of seriousness to both husbands and wives. The results are shown in Figure 243. These complaints are to be regarded partly as rationalizations and partly as symptoms of underlying problems, rather than as basic factors, such as personality deficiencies or sex maladjustment. Such a list of grievances will vary from period to period, probably from country to country, and perhaps by social or occupational classes. Figure 243, however, serves as a good inventory for the class from which most college students come.

Many of these grievances would be of importance in the close association of any two persons, whether of different sex or not. But marriage is an association of male and female; hence, sex must be an important relation in marriage. It is commonly said by those who have looked closely into the experiences of divorced persons just prior to the breaking up of the marriage that sex difficulties between mates are always, or nearly always, present in divorce. But such a statement tells us little since a divorce means that sex relations have probably been terminated at some prior time. Furthermore, sex among human beings is not a simple physiological reaction relatively unaffected by learning, as it is among rats, but instead is conditioned by experience and a large variety of social and cultural factors. This is shown by Kinsey's findings which reveal striking variability in sexual behavior according to social class.[21]

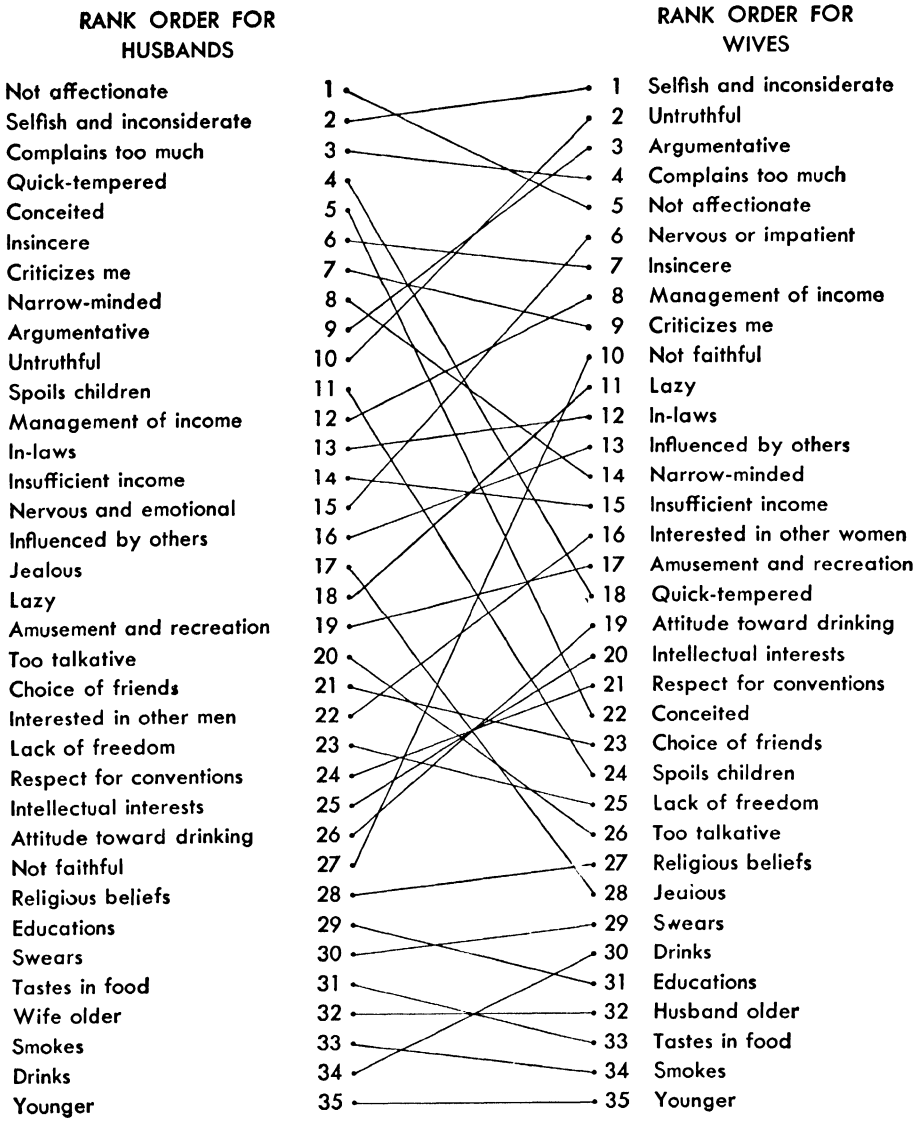
If there is failure in the sex aspects of marriage, this failure may be due to psychological and cultural factors that impinge on sex and disturb its operation. Sex maladjustments of an organic nature are rare. Burgess and Cottrell report that "with the majority of couples, sexual adjustment in marriage appears to be a resultant not so much of biological factors as of psychogenetic development and of cultural condition of attitude toward sex."[22] A somewhat similar position is taken by Levy[23] and by Harriet Mowrer,[24] who see the sexual side of marriage as largely a matter of personality adjustment between two individuals. According to this view, personality is regarded as generally the most crucial single factor in marital adjustment. Personality is, of course, a complicated set of habits that serve

[21] Alfred C. Kinsey *et al.*, *Sexual Behavior in the Human Male* (Philadelphia: W. B. Saunders Company, 1948).

[22] E. W. Burgess and L. S. Cottrell, Jr., *Predicting Success or Failure in Marriage* (New York: Prentice-Hall, Inc., 1939), p. 347.

[23] John Levy and Ruth Monroe, *The Happy Family* (New York: Alfred A. Knopf, Inc., 1938).

[24] Harriet Mowrer, *Personality Adjustment and Domestic Discord* (New York: American Book Company, 1935).



243 **Sex Differences in the Seriousness of 35 Grievances**

(From Lewis M. Terman, *Psychological Factors in Marital Happiness*, New York, McGraw-Hill Book Company, Inc., 1938, p. 105.)

to make us either integrated, nervous, or psychotic.

Personality of Happily Married Persons

Personality is a vast area, only partly charted, and much too complex to be described in a few paragraphs. However, Terman has tried to describe how the many different personality habits affect happiness in marriage. He summarized his findings in popular terms as quoted below. His summaries as thus expressed are necessarily approximate, since they are not the precise language of science.

Happily married women, as a group, are characterized by kindly attitudes toward others and by the expectation of kindly attitudes in return. They do not easily take offense and are not unduly concerned about the impressions they make upon others. They do not look upon social relationships as rivalry situations. They are co-operative, do not object to subordinate rôles, and are not annoyed by advice from others. Missionary and ministering attitudes are frequently evidenced in their responses. They enjoy activities that bring educational or pleasurable opportunities to others and like to do things for the dependent or underprivileged. They are methodical and painstaking in their work, attentive to detail, and careful in regard to money. In religion, morals, and politics they tend to be conservative and conventional. Their expressed attitudes imply a quiet self-assurance and a decidedly optimistic outlook upon life.

Unhappily married women, on the other hand, are characterized by emotional tenseness and by ups and downs of moods. They give evidence of deep-seated inferiority feelings to which they react by aggressive attitudes rather than by timidity. They are inclined to be irritable and dictatorial. Compensatory mechanisms resulting in restive striving are common. These are seen in the tendency of the unhappy wives to be active "joiners," aggressive in business, and overanxious in social life. They strive for wide circles of acquaintances but are more concerned with being important than with being liked. They are egocentric and little interested in benevolent and welfare activities, except in so far as these offer opportunities for personal recognition. They also like activities that are fraught with opportunities for romance. They are more inclined to be conciliatory in their attitudes toward men than toward women and show little of the sex antagonism that unhappily married men exhibit. They are impatient and fitful workers, dislike cautious or methodical people, and dislike types of work that require methodical and painstaking effort. In politics, religion, and social ethics they are more often radical than happily married women.[25]

[25] Lewis M. Terman, *Psychological Factors in Marital Happiness* (New York: McGraw-Hill Book Company, Inc., 1938), pp. 145–146.

Such is Terman's picture of the personalities of the happy and the unhappy wives. He then proceeds to give his conclusions about the personalities of the happy and the unhappy husbands:

Happily married men show evidence of an even and stable emotional tone. Their most characteristic reaction to others is that of co-operation. This is reflected in their attitudes toward business superiors, with whom they work well; in their attitude toward women, which reflects equalitarian ideals; and in their benevolent attitudes toward inferiors and underprivileged. In a gathering of people they tend to be unself-conscious and somewhat extroverted. As compared with unhappy husbands, they show superior initiative, a greater tendency to take responsibility, and greater willingness to give close attention to detail in their daily work. They like methodical procedures and methodical people. In money matters they are saving and cautious. Conservative attitudes are strongly characteristic of them. They usually have a favorable attitude toward religion and strongly uphold the sex mores and other social conventions.

Unhappy husbands, on the other hand, are inclined to be moody and somewhat neurotic. They are prone to feelings of social inferiority, dislike being conspicuous in public, and are highly reactive to social opinion. This sense of social insecurity is often compensated by domineering attitudes in relationships where they feel superior. They take pleasure in the commanding rôles over business dependents and women, but they withdraw from a situation which would require them to play an inferior rôle or to compete with superiors. They often compensate this withdrawal by daydreams and power fantasies. More often than happy husbands, they are sporadic and irregular in their habits of work, dislike detail and the methodical attitude, dislike saving money, and like to wager. They more often express irreligious attitudes and are more inclined to radicalism in sex morals and politics.[26]

[26] *Ibid.*, p. 155.

Terman states his theory, for which he has some evidence, as follows:

> Our theory is that what comes out of a marriage depends upon what goes into it and that among the most important things going into it are the attitudes, preferences, aversions, habit patterns, and emotional-response patterns which give or deny to one the aptitude for compatibility. In other words, we believe that a large proportion of incompatible marriages are so because of a predisposition to unhappiness in one or both of the spouses. Whether by nature or by nurture, there are persons so lacking in the qualities which make for compatibility that they would be incapable of finding happiness in any marriage. There are others, less extreme, who could find it only under the most favorable circumstances; and still others whose dispositions and outlooks upon life would preserve them from acute unhappiness however unfortunately they were mated.[27]

Premarital Traits Foreshadowing Success or Failure in Marriage

The traits that make or mar happiness in marriage exist in some degree in individuals before marriage. Adjustment in the engagement period is predictive of later adjustment in marriage.[28] Where "in-laws" and family finances are sources of friction, they will be more disastrous with some types of personalities than with others; and personalities are in large measure already formed by the time marriage is contracted.

Outstanding among the results of several investigations is the conclusion that a happy childhood in a home of happily married parents is conducive to a successful marriage. This conclusion is reported by Burgess and Cottrell, Terman, Popenoe,[29] Schroeder,[30] and Locke.[31] Also, most investigators find that education in high school and college helps to make marriage a success. This conclusion was reached by Burgess and Cottrell, Schroeder, Katherine Davis,[32] Hamilton,[33] and Kirkpatrick.[34] Burgess and Cottrell report that happiness in marriage is more likely to be found by men and women who are well socialized as young people; who participate in the activities of clubs, church and school; and who have many friends. Benson[35] finds that common interests of a familistic sort, as in home ownership and children, are associated with marital happiness, whereas certain interests which married couples may have in common but which are not familistic, like card-playing, are negatively associated with marital adjustment.

The Personality of Children

Some observers consider that the proper rearing of children is a more important objective of the family than is that of providing happiness for the mates. It is generally agreed that the early years are the most formative of personality. These early years are spent largely in association with parents, nurses, brothers, sisters, and playmates who have connections with the family. Hence, the family environment is most important in making the personality of the adult what it is.

[27] *Ibid.*, p. 110.

[28] Ernest W. Burgess and Paul Wallin, *Engagement and Marriage* (Philadelphia: J. B. Lippincott Company, 1953).

[29] Paul Popenoe, "Marital Happiness in Two Generations," *Mental Hygiene*, 21: 218–231, April 1937.

[30] Clarence W. Schroeder, *Divorce in a City of 100,000 Population* (Doctoral dissertation, University of Chicago, 1938).

[31] Harvey J. Locke, *Predicting Adjustment in Marriage* (New York: Henry Holt & Co., Inc., 1951).

[32] Katherine B. Davis, *Factors in the Sex Life of Twenty-Two Hundred Women* (New York: Harper & Brothers, 1929).

[33] Gilbert V. Hamilton, *A Research in Marriage* (New York: A. C. Boni, Inc., 1929).

[34] Clifford Kirkpatrick, "Factors in Marital Adjustment," *American Journal of Sociology*, 43: 270–283, September 1937.

[35] Purnell Benson, "The Interests of Happily Married Couples," *Marriage and Family Living*, 14: 276–280, November 1952.

The Terman theory of factors in marital happiness lays great weight on genetic factors and/or elements of basic personality structure established in early childhood. In either case, the traits are difficult to change and remain relatively fixed in most instances. That they can often be changed is shown, however, by clinical studies of psychoanalysts and other counselors. Rogers [36] reports that clients successfully using non-directive therapy made significant, measurable gains in maturity whereas a matched group not exposed to such therapy showed no change. Other studies [37] show that role-playing focused on aspects of interpersonal competence resulted in appreciable increases in such competence.

Criteria of a Good Family Environment

One index of failure in the socialization process is juvenile delinquency; another is mental disorder. The former is anti-social, the latter anti-self, although the two may be interrelated.

To ascertain the characteristics of a good family environment from the standpoint of child-rearing, a promising method is to compare the home background of well-adjusted and poorly-adjusted children. Terman found in his marriage study that a child's chances of achieving a happy marriage are much greater if his parents have been happily married. Also favorable for marital happiness is a close affectional relationship of the child with his parents, evidenced on the one hand by the absence of serious conflict between parent and child, and on the other by the child's sharing of confidences with his parents. In another study,[38] a high degree of correlation was found between the behavior adjustment of 33 nursery-school children and the marital adjustments of their parents. For instance, of 22 couples who were poorly mated, 20 had children who were poorly adjusted; whereas of 11 couples who were well mated, 10 had children who were also well adjusted. A good family environment for children, then, is one that provides as emotionally satisfying relationship with parents, based on affection and protection. Underprotection and underaffection lead to feelings of insecurity, which in turn sometimes cause the child to resort to anti-social behavior as a means of compensation. For example, a comparison [39] of delinquent and non-delinquent children from the same family showed that the former were those who for one reason or another had failed to develop an emotionally satisfying relationship with their parents. External family situations, such as change of residence and employment of mother, do not affect a child's feelings about himself as much as do the kinds of relationships he has with his parents, specifically his feelings about whether his parents are too strict with him, expect too much of him, treat other members of the family better, and have qualities that he does not admire.[40]

While an affectionate relationship between parent and child is desirable, there are dangers in affection if it is given unwisely and in large doses. Overaffection and overprotection tend to produce the "spoiled child," especially if association with other

[36] Carl R. Rogers and Rosalind F. Dymond (eds.), *Psychotherapy and Personality Change* (Chicago: The University of Chicago Press, 1954).

[37] H. R. Stanton and E. Litwak, "Toward the Development of a Short Form Test of Interpersonal Competence," *American Sociological Review,* 20: 668–674, December 1955.

[38] Dorothy W. Baruch, "A Study of Reported Tension in Interparental Relationships as Coexistent with Behavior Adjustment in Young Children," *Journal of Experimental Education,* 6: 187–204, December 1937.

[39] William Healy and Augusta Bronner, *New Light on Delinquency* (New Haven, Conn.: Yale University Press, 1936).

[40] Don C. Carter, "The Influence of Family Relations and Family Experiences on Personality," *Marriage and Family Living,* 16: 212–215, August 1954.

children does not provide a corrective. Studies [41] of overprotective mothers show that a proportion larger than would occur by chance were underprotected and underloved in their own childhood, so that their present behavior represents overcompensation on their part. It appears to be difficult to achieve psychological balance once the scales of personality have been tipped.

Praise and blame, like affection, are powerful instruments in shaping personality. A number of studies show that the good family environment provides steady moderate discipline, rather than either of the two extremes — that is, harsh discipline or no discipline at all. Terman found that the type of home discipline which most tends to be associated with marital happiness is that which is described as "firm" but not "harsh." The harsh type of discipline characterizes the so-called authoritarian household, while the firm is more often associated with the democratic or equalitarian household. Sanderson and Foster [42] compared 55 farm families according to type of control pattern and found that traits commonly regarded as of social value, such as participation in community affairs, were more frequently found in the equalitarian than in the authoritarian families. In another study [43] it was also found that poor parental discipline, taking the form of extensive criticism, was associated with poor adolescent adjustment. Criteria of a good family environment reported by this investigation are: little parental criticism; absence of nervousness in both parents; frequent confidences between parents and children; some physical expression of affection; and common family activities.

[41] Elizabeth Hough, "Some Factors in the Etiology of Maternal Overprotection," *Smith College Studies in Social Work*, 2: 188–208, March 1932; also Patricia Foley, "Early Responsibility and Affection Hunger as Selective Criteria in Maternal Overprotection," *ibid.*, 2: 209–223, March 1932.

[42] D. Sanderson and R. G. Foster, "A Sociological Case of Farm Families," *The Family*, 11: 107–114, June 1930.

[43] Ernest W. Burgess, *The Adolescent in the Family* (White House Conference on Child Health and Protection, III A; New York: D. Appleton-Century Company, 1934), p. 274.

THE FUTURE OF THE FAMILY

The review which has just been given of the different functions of the family found in the various preliterate cultures and in the historical period shows that the family has changed a good deal in the past and has assumed many different forms and functions. The family has proved to be a very resilient and flexible institution. Despite radical changes in form and function, the family has continued to exist in every society known to us. The craving for affection and the need of rearing children have undoubtedly been fundamental factors in making the family an omnipresent and enduring social institution.

What has been happening in recent years is the decline of the family as an economic institution, with consequent loss of many social functions. The greatest loss of these functions is in city families, and is in the main due to the forces flowing from the invention of the steam engine, which led to factories and the transfer of the economic functions from the home — a transfer which was responsible for the large number of cities.

These social functions of the family have by no means entirely disappeared, but there has been a relatively great decline. So great has been the change that young people today think of the family chiefly as an institution for the provision of marital happiness and the rearing of children. These functions of the family need more study. It seems altogether probable that further study will reveal knowledge that will make it possible for the family to be a source of greater happiness for all its members. In the past, students of the family have focused their attention primarily on the economic and social

functions and have made little effort to solve in a scientific way the vital problems of personality.

Of the many different forces that will play upon the family in the future, three are likely to be rather important. These are the uses of electricity in the home, scientific discoveries in biology and chemistry affecting sex and reproduction, and discoveries in the psychology of the learning process.[44]

Electricity brings power back into the home. It will not bring back much production into the home because of the economies of mass production in factories. But electricity will strengthen the home functions of recreation and education through radio, television, facsimile transmission, phonograph, electric wire recorder, motion pictures, electric workshop, and so on. Electricity also brings many conveniences for the yard, library, playroom, dining room, and kitchen.

Advances in our knowledge of the physiology and chemistry of the human sexual and reproductive systems have great significance for the family in the future. A simple, safe, and effective anti-fertility compound is the subject of much research, with great implications for the size of family, especially in overpopulated areas, as well as for sex morals. Other discoveries make possible the more effective promotion of fertility among married couples previously sterile. Advances in artificial insemination and the preservation of germ cells may give a new fillip to the lagging cult of eugenics. New knowledge regarding the sex hormones and nutrition has potentially great value for control of the aging process.

The third force likely to influence the family of the future is the discoveries in science relating to the learning process. Of all the social influences associated with happiness, the family is foremost, though religion and occupation are also important. Many attributes of the family affect happiness, but it is generally agreed that affection, which is closely related to sex, is of great significance. Sex, which has long been a matter under taboo, is now much more in discussion and print and is likely to be the subject of further research, especially in that phase that relates to affection. Discoveries in this area may affect profoundly the happiness of mates.

Then the learning process as related to children is one on which research is very active now; results of these researches may prove of great value in developing the personalities of children.

Both the electrical inventions and the scientific discoveries related to the learning process affect the two most prominent functions of the modern family — the provision of happiness between mates and the normal development of the personalities of the young.

In the past, societies have been characterized quite generally by a single prevailing type of family organization. But at present many different types of family organization exist, a situation which may be expected to continue in the future. Mowrer [45] lists in the city today the paternal family; the maternal family; the equalitarian family; conventional and unconventional; and the filiocentric family. The rural family is quite different from the urban family, and the village family is somewhat different from both, though it tends to resemble the urban family more than the rural family. A question has been raised whether a new type of family is developing on the urban fringe, with emphasis principally on play.[46] Broken families and families without children differ greatly from

[44] W. F. Ogburn and M. F. Nimkoff, *Technology and the Changing Family* (Boston: Houghton Mifflin Company, 1955), Part III, "What of the Future?"

[45] Ernest R. Mowrer, *The Family* (Chicago: The University of Chicago Press, 1932), p. 96.

[46] E. Gartly Jaco and Ivan Belknap, "Is a New Family Emerging on the Urban Fringe?" *American Sociological Review*, 18: 551–557, October 1953.

unbroken families and those with children. Thus continued diversification of family life is to be expected in our complex, rapidly changing society.

SUMMARY

Although the family is based on sex and parental functions and is therefore rooted in the biological nature of man, the family in human experience is always a social institution governed by cultural norms. Thus the folkways dictate whether polygyny, polyandry, or only monogamy is permissible; how and with whom marriage may be contracted; and how it is to be organized and dissolved.

Our review has shown that there has been no unilinear evolution of the family from the simple to the complex. Family life today is not greatly unlike early family life in its small size and relatively high mobility. Even so, the family has varied greatly. The modern family stands in marked contrast to the earlier agricultural family with its numerous, important economic functions — an almost completely self-sustaining business enterprise. Under these conditions, marriage is favored since a wife is needed on the farm, and children are useful workers. The efficiency and suitability of mates is emphasized over affection as a basis for marriage. The home becomes the central social unit in the community, and the family becomes the principal factor in determining the status of individuals.

With the growth of industry and the rise of cities, family life undergoes profound changes. The economic functions are largely transferred to outside agencies, and the family declines in economic significance. A wife is no longer automatically a worker and an economic asset as before, but may now be an economic liability. Hence, the economic motives for marriage, long characteristic of the institution, cease to be prominent. Children also are expensive, so with the aid of contraception the family tends to be much smaller. With the large-scale transfer of traditional functions to outside agencies and the reduction in the size of the family, increasing emphasis is placed on psychological values such as affection, companionship, and emotional security. This situation, in turn, has the effect of stimulating research in the field of personality and interpersonal relations. While the intensification of research along these lines in the future is likely to provide new aids in strengthening the personal side of family life, the extension of electric power into the home may increase the economic and recreational functions of the family as well. In contrast with the family of the past, that of the future will probably also be more highly differentiated.

QUESTIONS FOR DISCUSSION

1. Why is family life in general affected so greatly by the economic functions the family performs?
2. What are the advantages of the large family organization such as is found in China compared with those of the small family system of the United States?
3. What are endogamy and exogamy? How do you account for these practices?
4. Is polygynous marriage degrading to woman?
5. What is the significance of the increase in the remarriage of divorced persons in the United States?
6. Why is the family an omnipresent social institution?
7. Why are there so few instances of true matriarchal societies?

8. How does the urban family differ from the rural?
9. Is marriage more successful on a fifty-fifty basis, or when the husband is the head of the house? Why?
10. In the light of recent researches, what factors should one keep in mind in choosing a mate?
11. What is the relationship between common interests and marital happiness?
12. How can parents distinguish between affection and overaffection, protection and overprotection?
13. How is the trend toward increased leisure affecting family life?

TOPICS FOR REPORTS

1. William J. Goode, *After Divorce* (the first major field study of divorced mothers).
2. Interpersonal competence (autonomy, empathy, and creativity) and marital happiness.
3. The changing roles of husbands and wives.
4. Studies of factors affecting success in marriage.
5. The dilemma of the intellectually inclined female. (Mirra Komarovsky, *Woman in the Modern World* [Boston: Little, Brown and Co., 1953].)
6. Predicting success in marriage.
7. Marriage clinics in Europe and America.
8. Married women in the labor force.
9. The future of the family.

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The classic study of marriage among preliterate peoples, with special emphasis on origins. Valuable in showing monogamy on the lowest cultural levels, but faulty in regarding it as the only normal pattern for all societies.

22

The Interrelationship of Institutions

In 1906 there were 4,000 deer on the Kaibab plateau in Arizona.[1] To protect them, a bounty was offered for dead predators. As a result, 674 pumas and 3,000 coyotes were killed up to 1923. But the deer by then had increased to 100,000. In the next two years 60,000 deer starved. The plant forage was severely damaged for years to come by overbrowsing. By 1939 the deer had been reduced to 10,000.

There is a balance in nature; and this balance between predator, deer, and forage was upset when one element, predator, was changed. There are many similar food chains in nature, as for instance, owls–mice–acorns. These food chains are often intermeshed to form a web.

There is also a balance in society. For instance, the seal-hunting Chukchi of northeast Siberia[2] were a settled people, living in stationary abodes, with little property, little theft, little inheritance, highly developed hospitality, low status of women (whose work was at home), not much actual polygamy, few bachelors, no child labor, and low prestige of elders. This balance was disturbed when reindeer-herding replaced seal-hunting. The Chukchi became nomadic, lived in tents. Additional changes were: a developed sense of property, some thieving, less hospitality, rules of inheritance, women working away from home with herds, raised status of women, increased polygamy, more bachelors, child labor, and more prestige of elders.

In a somewhat similar manner the institutions of society are interconnected and, in a stationary society, are in balance. A modification of one institution in a chain or web affects other institutions, as will be noted in this chapter.

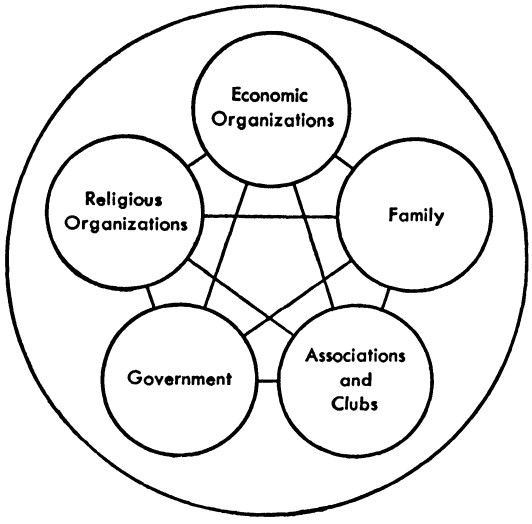
INSTITUTIONS AS PARTS OF A SOCIAL SYSTEM

A balance in nature or in society implies an interrelationship of parts. Predators of deer are related to the forage supply. The lack of prestige of elders among the Chukchi is related to an economy which cannot sustain idle old people. This interrelationship of the parts of a whole is called a social system, as discussed in Chapter 16.

Wherever there is a whole with related parts, there is a system, such as a clock, a human body, a family. Society, a nation, a city, a village — all are social systems. So also a part of society itself may consist of sub-parts and hence be a social system. We may consider the following institutions, family, church, government, economic organizations, and associations, as a whole cluster of institutions; and if they are connected, they are then a social system, as indicated in Figure 244. They are all interrelated. For instance, the family in the United States is generally formed by a marriage in a religious

[1] W. C. Allee *et al.*, *Principles of Animal Ecology* (Philadelphia: W. B. Saunders Company, 1949), p. 706.

[2] Robert Lowie, *Social Organization* (New York: Rinehart & Company, Inc., 1948), pp. 26, 27.



244 **Institutions as a Social System**

ceremony. The members of the family work in factories, offices, and stores. Their dwelling is regulated and protected by government, and the members may join a country club. So also each other institution shown in the chart is related to every other. Some of these interrelationships are of great practical significance, as will be shown in later paragraphs of this chapter.

The adjustment of parts is necessary for a successful social system, which should be in balance. The interrelationship of institutions is another illustration of adjustment, a *sine qua non* of social order as well as of physical survival. In this case, the adjustment is of one social institution to another rather than the adjustment of an individual to his environment. Thus in a state where married women in cities cannot own property, as was the case in England through much of the nineteenth century, there is a maladjustment between the family and government. The test of this maladjustment is the injustice to the individual married woman, yet the maladjustment arises from the fact that the law is not adapted to the family, especially when wives are employed and may be separated and divorced from their husbands.

This idea of adjustment of the parts of society gives rise to the concept of balance. Balance may be illustrated by the disposition of resources in the armed forces. There is thus a proper proportion of men and material between the navy, the army, and the air force, or between the branches of any one of these three divisions. The proper proportion depends upon the function of the military forces as a whole. This function depends upon the enemy, its location, and the nature of the attack. Presumably the proper proportion of resources going to the army, the navy, and the air force could be determined theoretically for any one time; and if there were no changes taking place in the world, a proper proportion could be established over time in a stationary society.

But when changes occur, as for instance, in the development of atomic bombs that can be deposited most successfully from airplanes, the proportion of resources that is proper becomes changed and a larger share must go to the air forces. The balance has been disturbed. There is an imbalance. The change that has occurred between the parts has impaired the equilibrium.

The idea of balance is brought into relief when a change occurs that disturbs an interrelationship. The emphasis is then on the imbalance which is to be corrected. Thus, concerning married women and property, when farming was a joint economic enterprise between husband and wife, who were considered as one, the old common law did not divide property but put it all together for the joint business, and a balance existed between the family and the law. It was a change, which took married women out of the home and put them to work elsewhere, that disturbed the balance. The imbalance was corrected by a change in the law.

The fall of the Roman Empire has been attributed to many causes, which generally indicate an imbalance. Perhaps the imbalance most commonly mentioned is that be-

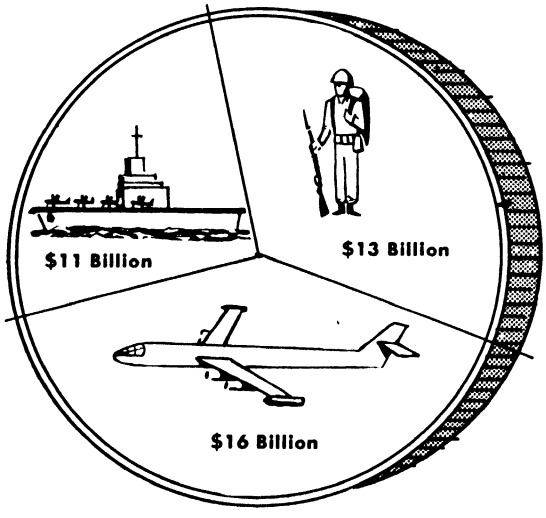
tween the agricultural production available and the governmental structure. The fall of the Mayan state before the coming of the Spaniards was due to an imbalance between the resources that went to support the high development of art and science and those which went to support the military part of the government.

In a society long stationary, the various social institutions are usually in balance, each being adjusted to the other. In a changing society there is likely to be an imbalance, as when reindeer replaced seal as food among the Chukchi, or when the British withdrew from India, or when the United States military forces occupied Japan. The restoration of equilibrium after a change may, of course, bring about a better balance than existed before the change. Such may be the case in India or among the Chukchi.

Differing interrelationships of parts are called patterns. The interrelationships among the institutions of society, whether they be in balance or out of balance, are generally quite intricate and differ from time to time and from area to area. These intricate arrangements of relationships may be referred to as patterns, very much as the arrangements of the parts of a watch assume a pattern.

For instance, in subsistence agriculture the pattern of institutions is quite different from what it is in a city. The family work on the farm in the country, while in cities they work away from home in various occupations. The government touches the family and business institutions in cities with regulations and aids in a greater variety of ways than it does in rural areas. There are many more associations and clubs in cities than in farming areas.

As to why patterns of institutional relations vary, there are many causes. Among the nonliterate peoples without much use of inanimate energy, important are climatic and geographic conditions which affect food supplies. The pattern of societies of Eskimos in the cold north and pueblo dwellers in warm semi-desert regions are greatly different. Another important factor in the patterns of social organization is density of population — high in cities, low in semi-arid regions. Many more institutions are possible and needed in cities. But underlying density of population are technology and nature. The institutional arrangement at the United States air base at Thule in northern Greenland is very different from that of the Eskimo who lived there before the coming of the air forces. Yet the climate is the same. Technology makes the difference possible. Certainly material culture is a pivotal point around which many different institutional patterns are built.



245 Balance in the Armed Forces

The military forces of a country are divided into the army, the navy, and the air force, which should be in proper proportions according to the balance of armed strength, technological development and geographical location of the enemy. The figures in the chart are for appropriations for 1954 in the United States for the military services.

FUNCTION

In the discussion of institutional relationships in terms of linkage and balance and

pattern, the language has been largely that of structure. For instance, in thinking of the relationship of family and church, there comes to mind the conception of a family as a group consisting of husband, wife, and children attending church, a place where people come to worship on Sunday. The family and the church are structures.

The significant relationship between church and family, however, is not between the two structures but between the activities of these structures, which we call functions.

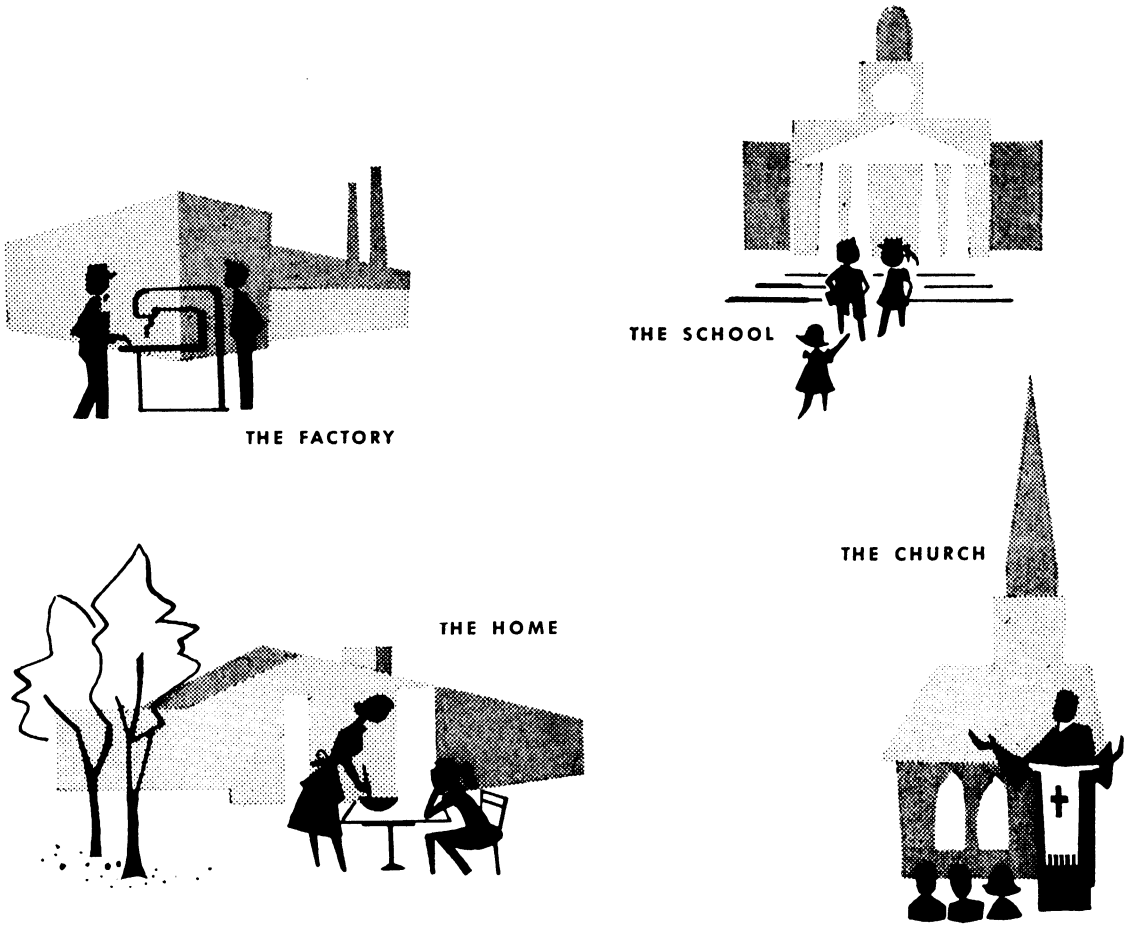
Thus one interrelationship of church and family has to do with education. Shall the children be educated in schools supported from public funds without any religious education given, or shall the children go to church schools where the doctrines of a particular religion are taught? Whatever the answer, the important relationship lies in the activity rather than in the structure. It is the actual teaching of children that is the issue.

What one institution does affects what other institutions do. The interconnection of institutions is best seen from the point of view of function rather than of structure, for the correlation of the different parts of culture is a functional one. The relationship of schools to industry in modern society is a matter of the functions performed by industries and the functions the schools exercise in equipping the young for earning a living in industry. If the major industry is agriculture, the family may do most of the educating for the future vocation of the youth. If, however, factory production utilizing mechanical power prevails, as it does in modern urban life, the school rather than the family may take over the educational function of training for work. Similarly, the family and the church are interrelated. There may be a taboo against the intermarriage of persons of different religious faith. The church may perform the marriage ceremony and have a great deal to say about whether or not the tie may later be severed. There may be prayers or sessions of worship in the household, and in some cultures the patriarch is a sort of high priest. The church and the family may share in the education of the children. In other ways as well, the family and the church are interconnected. The various institutions are all related to one another in the functions they perform.

The same institutions may have different patterns of relationship under various circumstances. In England the government gives financial support to the Church of England, and the ruler of England is the head of the Church. In the United States, the government is forbidden to support any organized religion. In France the church and state, once united, are now separated.

That such unique configurations can exist among the same set of social institutions is based in part on the fact that there is not necessarily close correlation between the form of an organization and its functions. This point is important and needs to be further considered. A committee, for example, may do a great many different things. It may legislate, execute, or judge, on a variety of matters. The committee organization may be the same in each case, yet its functions vary widely.

A less general illustration may be cited. The Pueblo Indians have a very elaborate ritual used in trying to get rains and to increase the fertility of the land. Their neighbors, the Navaho, have taken over some of this culture pattern but use it largely for an entirely different function, the curing of disease. The organizational structure is the same in both cases, but not so the function. Likewise, the Monroe Doctrine, an instrument of foreign policy of the United States, was announced more than a century ago for the purpose of keeping foreign armies off the soil of the Americas. The same pronouncement has been invoked to maintain the Americas to the south as a field for investment of American capital. We conclude, then, that a



246 Several Institutions May Perform the Same General Function

The school, the family, industry, and the church all are engaged in educating the young, but not in the same way, nor to the same degree.

social structure may be put to a variety of uses.

Function changes more frequently than structure. The modification of the function of an institution while its structure persists is a very important aspect of cultural evolution. Structure does not usually change as often as function. This fact may indicate the difficulty of making or inventing a new social structure. The phenomenon is sometimes called cultural inertia, but undoubtedly there is inertia in respect to functional change also. Structure changes less frequently because there is less need for change; as has been shown, the same structure can often serve many purposes. In any case, the persistence of structure while its functions change often misleads observers, who see the persisting structures more readily than the changing functions.

It must not be thought, however, that the structure of an institution may not be modified as its function changes. As the government takes on more executive functions, there is an increase in bureaus and commissions. The nursery school and the kindergarten, which handle the education of little children, have structures somewhat different

The Celebration of the Winter Solstice in England

1000 B.C.	The emphasis of the Druids was on the rites of the evergreen mistletoe
500 B.C.	Fires and light — burning of the Yule log to celebrate the return of longer days
100 B.C.	Feasting became the predominant feature
1000 A.D.	A church celebration emphasizing the nativity of Christ
1600 A.D.	Masquerading and dancing became so prominent that they were later forbidden by the Puritans
1700 A.D.	Children's activities were featured
1900 A.D.	Development of the commercial function

247 Persistence of Structure with Change of Function

from those of the high school and college, which serve youth. But despite the variations both in structure and in function, the persistence of the major institutions in all cultures and at all times is particularly to be noted.

The persistence of major institutions. Institutions persist because they have one or more essential functions which endure over the years. Such institutions in small communities, and often in large ones, take on many additional functions. This has been illustrated, for instance, in the chapters on the church and the family.

It is important to note, moreover, that the secondary functions of an institution may be modified and even curtailed, but they are not as a rule lost altogether. This can be seen, for example, as regards the church and its educational function. Education is not as significant a church activity at present as it has been in the past. There have been times when the church had a virtual monopoly over formal education. Today the public schools exercise this prerogative. Despite this fact, the churches still carry on educational activities of various kinds. The same situation exists for the family and its recreational function. The latter bulked large before the advent of commercialized play facilities. But the family, even now, takes care of the play needs of very little children. The coming of television strengthens the recreational function of the family. In the same way it could be shown that other functions have not been completely lost but only transferred in part. The recreation provided by the church, may be different from that provided by the club, and that provided by the family may be still different.

In a word, institutions share functions. What makes institutional patterns different at various times and places is differences in emphasis and degree in the performance of certain functions.

TRANSFER OF FUNCTIONS

Associations are taking functions from the major institutions. One of the striking characteristics of our time is the shifting of functions from one institution to another because of the rapidity of social change. Particularly noticeable is the use of special-purpose associations which may be said to perform some of the functions performed by the major institutions. The bridge club which furnishes recreation by playing cards renders a function formerly supplied by the family or the more general club. The bridge club may perform the function better or differently, but it is still a card-playing function or recreation. Other associations are concerned with hobbies, professions, types of recreation, or specialized functions derived from the major groupings of the economic institutions. These single-interest as-

a parent to possess a revolver, and the modern husband is more helpless against a robber than he was in earlier times against wolves. Indeed the state with its child labor and compulsory school attendance laws has stepped in to protect the children against their own parents.

Another function of the family was that of providing leisure-time activities, since there were few places of commercialized recreation in farming communities. The home was the place for entertaining, for visiting. But now moving pictures, parks, playgrounds, athletic fields, clubs, bowling alleys, billiard rooms, race tracks, automobiles, and the city streets provide attractions which take the members of the family away from the home for amusement. The development of recreational agencies has diminished the proportion of amusements furnished by the family.

Transfer of functions to government. In the Middle Ages, government in the small local community needed little machinery. Government in larger areas covered chiefly the provinces, over which a nobleman ruled. In wartime he exercised a good deal of authority. Nationalism as it is known today was just beginning, but no such vast array of functions was exercised by government then as now. In recent times, particularly in the twentieth century, local and central governments have been extending their activities into a great variety of fields. Government, either of cities or of the whole nation, has taken over functions of education, health, insurance, policing, furnishing relief and work to the unemployed, and providing recreation, fulfilling functions which were formerly performed by the family or the church. With regard to industry, governments now regulate those monopolistic industries the price of whose products is of great concern to many other businesses and to a large body of individual consumers. Such businesses are railroads, electric light, gas, and water companies, and banks. Modern government also exercises certain controls over industry in the protection of workers concerning such things as accidents, sanitation, the work of children and women, and sometimes wages and hours of work. The state, excepting the socialistic type, has not gone extensively into the field of production, although most governments undertake some slight production of goods. The state has no such dominant control of functions regarding production as the family possessed in the period of domestic economy, but even so, it seems fair to say that many functions of control and regulation of industry have been shifted from the family to the state. The socialistic trend of the state is thus seen to be due in part to the decline of the family.

The addition of functions to industry. In the Middle Ages the economic organization outside the family was slight compared to what it is today. There were markets, but they were crude — often merely plots of ground where traders placed their wares to be bargained for and exchanged — and very different from modern warehouses and stores. The pawnbrokers who weighed out gold on scales possessed practically none of the facilities of the modern bank. Transportation was over very bad roads, so that it was not possible to cover as many miles in the course of a whole day as an automobile will now make in half an hour. From such beginnings have come the great economic instruments of today such as factories, railroads, department stores, banks, and credit systems. These institutions have assumed the functions of production and distribution which previously were largely possessed by the family.

Although the functions of industrial organizations are largely economic, in some instances where stores or factories engage in welfare work or have company unions they may assume some educational, health, or protective functions. Again, certain indus-



248 "Telephone City"

Business and government in Western society have been getting bigger and the family smaller in terms of size and functions. The photographer has assembled in one picture 392 major building projects and additions completed in the United States by the Bell System from 1946 to 1949, only one-seventh of the total number erected in that interval in various communities. Indicative of the increasing size and scope of government is the fact that more than 7 million persons worked for government in the United States in 1953, about 1 in every 23 inhabitants. (By permission of the Bell Telephone System.)

tries or groups of them take on quasi-governmental functions. Many industrial plants, transportation companies, mines, banks, and stores employ private guards who behave much as public police do. In certain mining towns the company police become an organization of considerable importance in the lives of the miners. Industries also maintain lobbies around legislative assemblies in order to secure favorable legislation. Some industries, as for instance the railways and airlines, are forced in the interests of self-preservation to keep a close watch over what the legislature does regarding franchises and rates.

Changing functions from village to city. Villages and cities are called communities rather than institutions. But they may be looked at from the point of view of institutions, for communities are collections of institutions. Such a view is important, for we all live in large or small communities. Formerly and throughout history and the agricultural era, nearly everyone lived in villages. Now in the Western world large proportions of the population live in cities, as shown in Chapter 13. During the agricultural era the local community was small, a hamlet or village, and was characterized by very little formal government. In contrast to the situation in the large city today, the problems of government were not great. Everybody knew everyone else and what he had in the way of property. So even if one citizen stole from another he could not use property without everybody knowing it. This would not be true for outside robbers, of course. Each person also knew what the

other persons did, hence behavior was under close scrutiny of neighbors. Gossip and the value of reputation were most excellent policing devices. The village was thus a "face-to-face group" that regulated a good deal of activity without the use of any appreciable amount of governmental machinery. Much education of children and the formation of their personalities resulted almost automatically and unconsciously from the play of children in villages and from the operation of various group pressures regarding conduct.

The village still does this kind of regulating. But there has arisen the large city, and in industrialized nations at least as many people live in large cities as in villages. In the Middle Ages there were a few great cities but the proportion of the population living in them was very small. In a large city the citizens do not know one another, even close neighbors. The population moves frequently — approximately every two years in the large cities of the United States. Hence there is much anonymity of behavior. Personal property is easily hidden from the assessor. Criminals find a large city the best hiding place. Police and government regulations regarding cleanliness, health, and traffic, are developed to provide services that are rendered more or less automatically and unconsciously by the group forces of the small community.

In both hamlet and metropolis the interdiction of bad conduct is a function of the community, but the organization for controlling such conduct has changed as the community has grown from small to large.

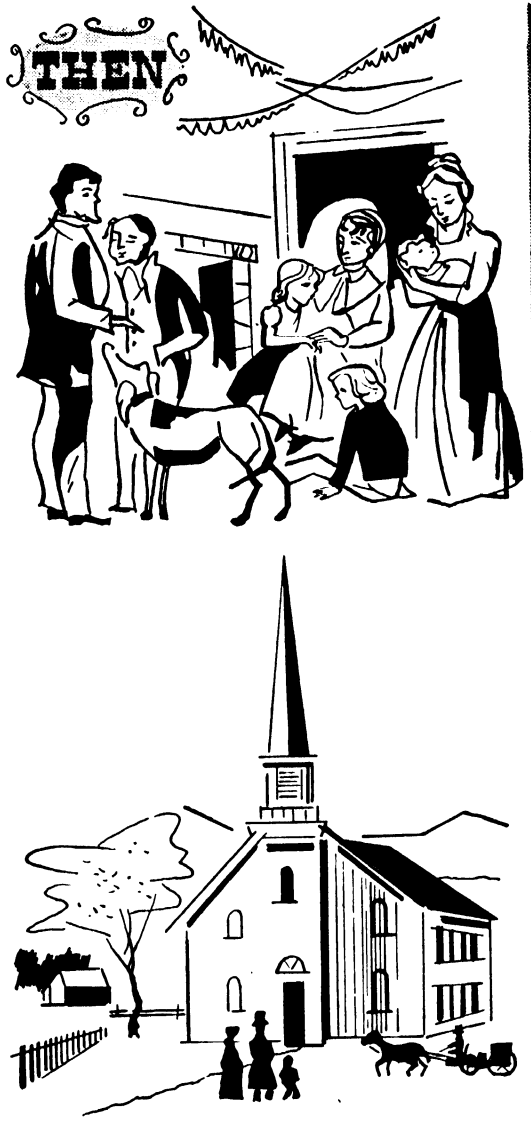
Shifts of functions between institutions. This brief review of the four major social institutions during the past few centuries in the Western world shows that the family and church have been losing functions from their complex of activities. On the other hand, two others, industry and the state, have been adding to their functions. The church has yielded functions in large part to government, while functions of the family have been shifted to both the state and industry. The functions of the village as a face-to-face group persist in villages still, but in modern cities these automatic community functions have given way to formal government. This does not mean, however, that the great growth of government, industry, and the minor associations is due wholly to the transfer of functions from the family, church, and village. Industry has grown in its own right, by virtue of invention in the field of technology. Moreover, the growth of technology, industry, and population has forced the growth of government. Likewise, the single-purpose associations have themselves expanded the particular functions they exercise far beyond what they were before.

New Institutional Functions

In the immediately preceding paragraphs it was shown how social evolution has shuffled functions and redistributed them among four important social institutions. Institutions have risen and fallen in the long course of written and unwritten history as they have gained or lost functions.

But the gain and loss of functions by institutions is not wholly a matter of shifting functions back and forth between them. For new functions are added and old ones lost. The family in the Western world no longer practices infanticide. That function has not been transferred to any other institution; it has been abandoned. So also the family no longer manages slaves; slavery has been prohibited. That function has been lost to the family, not transferred.

Similarly, institutions have acquired new functions. Government has added the function of regulating communication by television. Definite wave lengths are assigned to different stations, and a large number of regulations have been ordered in the United







249 The Transfer of Institutional Power

Several centuries ago, the family, church, and local community were relatively more powerful institutions than they are today. Now industry and state and federal government are dominant. In the past the relationship of the church to the growing state was a serious problem, whereas in our time a key question has to do with the nature of the relationship between government and business.

States by the Federal Communications Commission. This function did not exist before the creation of this commission and naturally could not have existed before the invention of radio and television. Likewise, the Federal Deposit Insurance Corporation is a new function, since deposits in banks were not insured against the failure of banks before.

No one has ever taken an inventory of what proportion of the state's present-day functions were transferred from other institutions and what percentage is new. Perhaps there is no great need for doing so.

There are general functions that "men live by," as Richard Cabot [3] phrased it. Such are love, play, work, worship, protection, education, and fighting. These general functions are common to institutions in all cultures. Recreation, thought of as a sum total, was at one time supplied largely by the family and by religious ceremonials. At the present time, private industry through commercialized recreation manages a larger share of this general function and the family a smaller share. In this sense, there appears to be a transfer of a portion of the total functions from family to industry.

Another useful idea in the conception of institutional change is the growth of function. When this is what one is interested in, then there is not so much concern about the transfer of functions, or the division of the field between the different institutions, as there is in the new functions viewed in detail. Thus, if there is interest in the regulatory function of the state in regard to human welfare, then the regulation of prison labor, the safeguarding of machinery, or the prohibition of night work for women are seen as new functions rather than as transfers. One is not interested here in whether the family once protected its women at night. Rather the interest is that a new function of regulating the night hours of labor of women in factories has been assumed by the state.

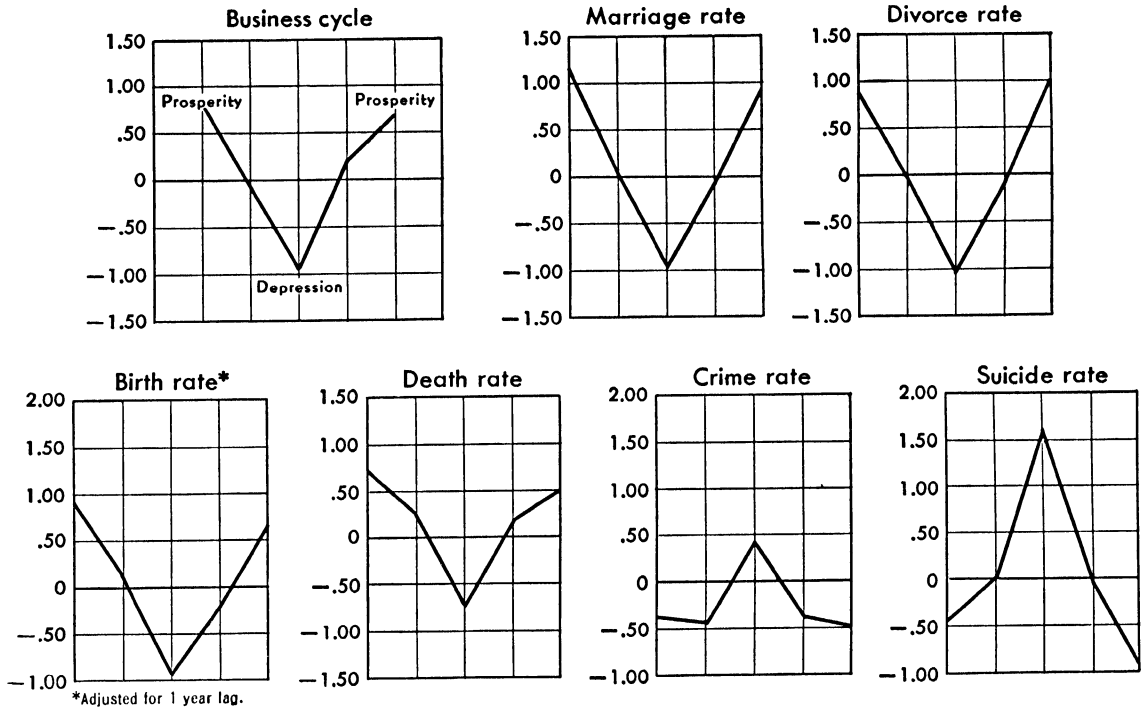
The conclusion of this analysis is that in modern times many functions have been shifted away from the family, church, and local community to government and industry and that the latter two institutions have experienced a great increase in functions, many of which when viewed in detail appear as new functions.

PRESENT PROBLEMS OF INTERRELATIONSHIP

In a changing society the interdependence of social institutions has a good deal of practical significance, for a change in one institution may affect other institutions. Some special clusters of interrelationships need to be mentioned because of their great importance at the present time. Some of these are the interrelations of social institutions with business during its fluctuations, and also the interrelations of government and industry. Chapter 24, "The Social Effects of Innovations," will discuss the interrelations of technology with the various parts of culture. Chapter 13, "Communities," showed how various social institutions within the community are affected by variations in the size of the community.

This matter of the interrelationship of institutions is an important part of sociology. Each of the special social sciences, such as economics and political science, deals with only one set of institutions. These special social sciences do not treat adequately the interconnections of institutions. Anthropology does this for the simple cultures but not for modern society. History generally concerns itself with unique events rather than institutions, hence not much on the interrelationship of institutions comes from the pens of historians. There is a need, therefore, for a sociology which shall be an overall social science to the extent at least of

[3] Richard Cabot, *What Men Live By* (Boston: Houghton Mifflin Company, 1914).



250 **Effects of Depressions on Society**

Social conditions change with the fluctuations of the business cycle. Having a business depression is like dropping a bombshell into society. There is hardly an institution or a custom that is not affected, showing very clearly the interrelationship of the economic factor with social conditions. The above chart shows a few such relations. The above business cycle is computed by averaging the business cycles from 1870–1920 in the United States for five periods: namely, the peak of prosperity, the half-way point in recession, the peak of depression, the half-way point in recovery, and the peak of prosperity. (Data from W. F. Ogburn and D. S. Thomas, "The Influence of the Business Cycle on Certain Social Conditions," *Journal of the American Statistical Association,* September 1922.)

treating in a broad way these interconnections of the various social institutions.[4]

The Institutional Effects of Economic Fluctuations

Economic institutions vary not only as they develop or degenerate over the years — as the factory system has grown and trade guilds have declined — but they have short-time variations which are called *fluctuations.* These fluctuations alternate between prosperity and depression and are referred to, not with much accuracy, as business cycles. In the paragraphs immediately following, we shall see how these variations in economic institutions cause variations in other institutions, thus demonstrating the interdependence of institutions.

As regards the family, the business depression lowers the marriage rate, the birth rate, the divorce rate.[5] Severe depressions seem to increase the illegitimate birth rate;

[4] W. F. Ogburn and A. Goldenweiser, *The Social Sciences and Their Interrelations* (Boston: Houghton Mifflin Company, 1927).

[5] W. F. Ogburn and D. S. Thomas, "Influence of Business Cycle on Certain Social Conditions," *Journal of the American Statistical Association,* 18: 324–340, September 1922.

to cause a higher unemployment rate among men than among women; but to increase the unemployment rate more for married women than for single women; and probably to prolong the period of parental responsibility for children.[6] The poorly integrated families suffer from the shock of depression more than the well integrated.[7] Families on relief move much more often than non-relief families.[8] Sample data suggest that the authority of the husband tends to suffer as a result of the depression.[9] Some handicraft industry is said to have been revived in families, but no data have been collected to confirm this last observation.

The church does not escape the influence of depressions either. Most observers think that the depressions affect church membership, but it is not known how, since the data are not very good and have not been adequately analyzed. The Methodist and Congregational Churches have had a greater gain in membership in depressions.[10] Church attendance in the Congregational Christian Churches increased slightly during the depression of the early nineteen-thirties. Village churches showed a marked decline in attendance from 1930 to 1936, but since the data are not available by years, it is not known whether the decline was less during the depression years 1930 to 1933[11] than in the recovery years of 1933 to 1936. Church membership is reported to have shown marked increases during the prosperous 1940's and 1950's, though the war may have had some influence on the religious boom of these years. Church contributions declined greatly during the depression years, 1929 to 1933.[12] The reduction in income of the churches affected the benevolences slightly more than the preachers' salaries. The various activities of the churches appear to have suffered during the depression of the early nineteen-thirties. With declining income and with building debts that did not decline, the situation was not very favorable for expansion of activities.[13] The effect on evangelism is not known; if there was any increase it was not conspicuous in the nineteen-thirties.

Governments are affected by depressions, especially if the depression is severe. In the depression of the nineteen-thirties, the difficulty of raising money by taxation in local governments caused curtailment of some functions, especially in education. Economy programs became popular, but new obligations were assumed, particularly in the care of the unemployed. This obligation was too heavy for most local governments, and it was transferred in large part to the Federal Government. The Federal Government also put forth many efforts to lessen the shock of the depression and to bring about a revival of business. The activity of the Federal Government increased by a large percentage. A great many new boards and commissions were appointed to deal with problems of the depression.

These data indicate only some major influences of the business cycle on certain social institutions. The minor influences which have in general not been studied so

[6] S. A. Stouffer and Paul Lazarsfeld, *Research Memorandum on the Family in the Depression* (New York: Social Science Research Council, 1937).

[7] Robert C. Angell, *The Family Encounters the Depression* (New York: Charles Scribner's Sons, 1936).

[8] R. S. Cavan and K. H. Ranck, *The Family and the Depression* (Chicago: The University of Chicago Press, 1938).

[9] Robert and Helen Lynd, *Middletown in Transition* (New York: Harcourt, Brace & Co., Inc., 1937); and Mirra Komarovsky, *The Unemployed Man and His Family* (New York: The Dryden Press, 1940).

[10] George P. Davies, "Social Aspects of the Business Cycle," *Quarterly Journal of the University of North Dakota*, 12: 107–122, January 1922.

[11] E. deS. Brunner and I. Lorge, *Rural Trends in Depression Years* (New York: Columbia University Press, 1937), p. 305.

[12] S. C. Kincheloe, *Research Memorandum on Religion in the Depression* (New York: Social Science Research Council, 1937).

[13] *Ibid.*

thoroughly are much more numerous. For instance, one study has listed in the neighborhood of 100 possible influences of business depressions upon education, such as changes in curricula, personnel, legislation, salaries, building, and attendance.[14]

Variations in the economic organization affect not only these major social institutions in countless ways, but also many social activities.[15] Crime tends to increase during depressions. Immigration is slowed up. Death rates are lower. Suicides are more frequent. Strikes are fewer. There is less drinking of beer and whiskey. The activities studied indicate that the economic institution is closely connected with many parts of culture. But the available studies probably indicate only a very small fraction of the total influences.

The Problem of Government and Industry

We have just seen that variation in economic conditions causes changes in the family, the church, the government, and many other institutions. Similarly the variation in government which is due to war causes changes in industries, the family, the church, and other organizations — another indication of the close relationship of social organizations.

Of these interrelationships of institutions, a major issue in our present age is: what shall be the relationships between government and industry? This question was raised in Chapters 17 and 18, but it needs to be seen in the light of the conception of the interrelationship of institutions. The chief concern regarding the relations of government and industry is the shift of production from industry to the state. This is the problem raised by socialism.

Government aid and regulation. Industry, as the reader knows, was at one time under the control of the family. But it grew too big for the family and prospered as an independent social institution relatively free from control by any other institution. This condition of freedom is variously called *laissez-faire* or free enterprise. But no institution exists alone, free of any interrelationship with other institutions. Industry has become increasingly interrelated with government, rather than with church or family.

This interrelationship was at first of a two-fold nature. Industry depended upon government for aid, and government attempted to regulate industry. The problem really became one of struggle for power, rather than one of transfer of functions. For if government was to aid industry by establishing a tariff, or by supplying stable money, or by protecting investment in other countries, or by giving subsidies to railroads or airlines, it was desirable for industry to have some power over government, at least in those areas with which industry was concerned. On the other hand, if monopolistic industries of the type essential to all others, such as railroads or electric power companies, charged higher prices to get more profits at the expense of the other industries, it was necessary that the prices of these monopolistic utilities be controlled. The family or the church was not in a position to control industry. Government was the only institution that could do it. The government early began regulation to protect its citizens, as in the employment of children and of women, and in the requirement of safeguards over dangerous machinery. It also imposed strict regulations on banks, and controlled prices on some transportation lines. Governments in the United States owned some industries such as the supply of water to residents of cities, and occasionally

[14] The Educational Policies Commission, *Research Memorandum on Education in the Depression* (New York: Social Science Research Council, 1937).

[15] W. F. Ogburn, "The Fluctuations of Business and Social Forces," *Social Forces*, 2: 1–21, January 1923.

a street car line. In other countries, governments came to own the railroads, telegraphs, and telephones.

At the same time that government was extending its regulatory functions, industry was making gains and extending its influence over government in areas such as those dealing with the tariff, taxation, and subsidies for railroads and agriculture. This struggle in democratic countries was in part a struggle for the votes of the citizens. As a part of its campaign, industry has undertaken to provide welfare work, such as pensions, insurance, and health and recreational facilities.

In this struggle for power there entered a new factor — war. For the War of 1914–19 and that of 1939–45 both affected greatly the relations of industry and government. In the United States, and in other countries, industry and government cooperated quite smoothly in trying to defeat the common enemy. But in this cooperation the seat of power shifted quickly to the government, since it was natural for the government to direct the war. Furthermore, government bureaus and departments were a major purchaser of the products of industry; hence the government acquired power quite readily. The government restrictions, by rationing and otherwise, on the production of electric refrigerators and other commodities for the home were not a particular hardship on the industries involved, for there were enough orders for war equipment to pay them for the loss.

War may be viewed as a special form of crisis, of which a severe business depression is another kind. In crises governments assume more power and extend their functions. During the depressions of the 1930's, the federal government in the United States greatly increased in power and in functions in combatting unemployment, distress in agriculture, etc.

After the war was over, the government of the United States withdrew from most of its wartime control and direction of industry. Rationing and price control were abandoned even when the supply was short and the result was a rise in prices. But the withdrawal was not all the way back to the antebellum conditions. Governmental control over credit was greater than formerly. In the special case of atomic energy, the government was in production. It also extended its control over housing in postwar years. In Europe, the withdrawal of government from industry was generally less than in the United States.

Governmental ownership of industry. The rise of government and of industry and the decline of the family and the church are the outstanding institutional trends since the Middle Ages. The problem of the relation of these two growing major institutions — government and industry — is one of the great problems of our time. By "our time" is meant the nineteenth and the twentieth centuries, and possibly the twenty-first century.

Russia, after the violent Bolshevik revolution of 1917, committed herself to the governmental ownership of an industrial establishment which was not large, for the U.S.S.R. was an agricultural country. With successive five-year plans, production has been magnified under governmental ownership and direction. During this period there were the threat of war and the preparation for war, which may be interpreted as a stimulus and an aid or as a handicap and a deterrent. Russia's achievement under governmental ownership is indicated by steel production of 38 million tons in 1953 as compared with 63 in Western Europe and 71 in the United States. The gross national product in United States dollars at estimated domestic purchasing power was 110 billion for Russia, 305 for Western Europe and 385 for the United States.[16] While this achieve-

[16] Joint Committee on the Economic Report,

ment was attained under governmental ownership, it was also a dictatorial government that could deny production of consumer goods for the people and concentrate on producers' goods, necessary for war material, and could thus obtain the capital to get technological equipment so necessary for economic production from internal sources, without depending upon outside sources.

From 1948 to 1953 the national product of Russia grew 50 per cent faster than in the United States; but this rate is deceptive, since Russia started from a low base due to war destruction.

At first glance, governmental ownership does not seem particularly applicable to agriculture. Ownership of one's farm has been a widespread desire in all agricultural countries, and many revolutions have occurred to break up large holdings in farming land to redistribute it in small farms to individual owners. About 70 per cent of Russian agricultural production comes from 90,000 collective farms, of which 5,000 are state farms which account for 10 per cent of all agricultural production. The transformation of agriculture from private farms to socialized farms has been accompanied by compulsion and by shortages in agricultural production.

In Britain following the close of World War II, the government acquired the telecommunications, coal, electricity, and transports in 1945; and the banks and aviation in 1946. With these and the "nationalization" of the steel industries, about 20 per cent of British industry was governmentally owned.[17] The acquisition was by purchase. This governmental sector in the economic system was reduced, upon the election of the Conservative Party to power, by the return to private ownership of the iron and steel industries and road transports. Television broadcasting was also set up under private control. At the same time the government developed plans for building atomic reactors for the production of power for private industrial use.

The achievements or failures of government-owned industry in Britain were not spectacular one way or another. The evidence is still debated by those who favor government ownership and those who oppose it. The trial was, however, an important experiment by a highly industrialized nation with a long democratic tradition and with a relatively high plane of living for employees.

In Czechoslovakia, the private owners of important industries had been dispossessed upon the occupation of the Germans; and in the disorganization the owners had been so scattered that with the defeat of Germany the Czechs acquired the big industries such as coal and steel without having to purchase them. Governmental ownership has been so tightened with the coming into power of the Communists that in 1948 all industries with 50 employees or more were the property of the government.

In Sweden a system has evolved in which partial, or occasionally complete, government ownership is often combined with private operation. The part ownership is in shares of stock. Industries in the system are iron mines, forests, hydro-electricity, radio, liquor, transport, and telephones.

In China, the victory of the Communists in the civil wars in 1949 brought a program for governmental ownership of industries; but at first the lack of personnel and experience among the Communists left much of the operation of industries temporarily in private hands. Later, governmental ownership of industry was greatly extended, and the government — after dispossessing the large landowners — aided in setting up

Trends in Economic Growth: A Comparison of the Western Powers and the Soviet Bloc (Washington, D.C.: Government Printing Office, 1955).

[17] Herman Finer, "Planning and Nationalization in Great Britain," *International Labor Review*, 57: 157–186, March 1948; 283–299, April 1948.

large cooperative farming units, embracing over 92 per cent of the farms. At the present time, nearly 90 per cent of the Chinese people are agriculturalists,[18] and the city populations are largely engaged in trade. But in the future an increasing proportion of China's economic activities will be in power manufacturing, because China has both coal and iron. The Chinese have a tradition of some governmental enterprise as shown in the construction by the government of the Great Chinese Wall and of extensive irrigation works. There is also prestige in governmental employment. Since large private industries are few, a strong sentiment in China against their ownership by the government does not exist.

In India the Communist influence is slight. The country is largely agricultural, though manufacturing and transportation are more highly developed than in China.

India's great need is capital to industrialize and to increase consumption. Governmental ownership or heavy taxation is more likely unless investment from outside sources can be had. The pressure is strong toward enlarging the governmental sector in industry. In her second five-year plan, India expects to contribute 8 or 9 per cent of her gross national product to improvement, while China contributes 22 per cent. India has expectations of some private investment.[19]

The United States has the least governmental ownership of industry. The most conspicuous examples are the ownership of hydro-electric power in the Tennessee Valley and the ownership of the production of atomic energy. The industrial achievements of the United States are impressive, as are also those of Western Europe.

The tendency for governments to take over the function of large-scale production, particularly in important utilities and key industries, seems to be growing over the world, although private ownership is statistically predominant. How far this tendency will go, or whether it will increase, slow down, or be reversed, is not, of course, known.

In the poorly industrialized countries there is a great demand to industrialize and this can only be done by the greater use of science and improved technological equipment. The capital to acquire machines for factories and tools for farms can be obtained through the aid of a strong government with some government ownership or by inducing private investment or by both these methods. The comparative success of governmental ownership of industry in a highly industrialized country may be quite different from that of an undeveloped country.

The pressure for governmental ownership seems to arise often in emergencies or crises. How governmental ownership will fare as compared with private capitalism when the emergencies pass remains to be seen.

The economic tests for the success or failure of "the production state" will be the rate of production, the provision of new capital, the creation of new inventions, the assumption of risks, the meeting of consumer preferences, and the elimination of the inefficient.

On the social side, the question arises of possible loss to the individual of freedom and of intitiative since the tendency of government in production is to be authoritarian and unresponsive to consumers' wants.

A transfer of productive functions from industry to government does not occur smoothly. There is a struggle for power; for those who possess economic functions have power.

The "welfare state" — the government

[18] Gerald Winfield, *China: The Land and the People* (New York: William Sloane Associates, Inc., 1948).

[19] For an interesting account of the race between Communist China and democratic India to industrialize — a race of great potential significance to the world — see Wilfred Malenbaum, "India and China: Development Contrasts," *Eastern Economist Pamphlet*, No. 35, New Delhi, India, 1956.

which does much in public welfare work for its citizens — is not to be confused with the "socialistic state," which is one where government owns the means of production. The socialistic state will probably be a highly developed welfare state; but so may a private capitalistic state with few productive functions, though industrial taxpayers may resent the payment of taxes for this welfare work.

SUMMARY

The parts of a culture are interrelated somewhat like the parts of a clock, and not like a handful of coins. This interrelationship is well shown by the dramatic changes that take place in many parts of society during a war or during a business depression. Social institutions, which are important parts of a culture, cannot be understood fully when considered separately. Their interrelationships make a culture pattern, which varies in different areas and at different times.

For this reason the history of an institution such as the family does not show the same course of change for every people. Different societies have different technologies, different sex ratios, different-sized communities, etc.; hence the family institution, influenced by these different factors, follows a somewhat different course in its development in different areas. But because of the special influence of the factors of material culture and size of population, there are uniformities in some institutions as they are found among low hunting cultures, high hunting cultures, hoe cultures, plow cultures, and mechanical power cultures.

The major institutions, such as the family and government, which are found nearly everywhere, have not just one function, but many. As the culture pattern changes, a function may shift from one institution to another. Thus today the care of the old is being transferred in part from the family to government. In modern times, many functions of the family and of the church are being transferred to the government, to industry, or to special-purpose organizations such as the school. Also new functions that did not exist before may be added to an institution. Thus government will either own or regulate the production and use of atomic energy.

As a result of these transfers and additions, government and industry are expanding greatly. At the moment, there is much discussion about which functions will go to government and which to industry. This is the issue of socialism. For instance, will government undertake production of electricity, or leave it to private industry? Also, though the increased social control by industry and government has diminished our freedom, the decreased social control by the church and the family has increased it.

QUESTIONS FOR DISCUSSION

1. What are the causes of imbalance in a social system?
2. Why do the patterns of social systems vary?
3. Why may an institution persist even though it loses many of its functions?
4. Which major social institutions have been losing functions? Which have been gaining?
5. Which is changing more rapidly, the structure or the functions of
   (*a*) the state
   (*b*) the church
   (*c*) the family?
6. What are some of the interrelationships of the following institutions at the present time in the United States:
   (*a*) industry and church
   (*b*) church and state
   (*c*) school and family
   (*d*) commercialized recreation and the family?

7. What is responsible for the transfer of educational functions from the family and church to the school?
8. Why do new institutional functions arise?
9. Does the church at the present time exercise any functions which it did not previously have?
10. How do fluctuations in the business cycle affect
    (*a*) family life
    (*b*) the church
    (*c*) government?
11. What is the relation of state and industry in
    (*a*) the United States
    (*b*) Russia
    (*c*) Britain
    (*d*) Sweden?
    Which system is most efficient?

TOPICS FOR REPORTS

1. The social effects of rapid technological change in the simpler societies.
2. The interrelationship of social institutions in the culture of India.
3. The changing functions of the school.
4. A comparative study of the functions of the church in one of the original American colonies and in the same state today.
5. The interrelations of church and state in Russia, France, and England.
6. The social consequences of "the production state."

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Part Seven:

Social Change

The students who read these lines will live, on the average, about fifty years more. Fifty years hence, business will be different from what it is now. Government is also due to make important changes. Even religion and the family will not remain the same during this period. We know they will change because it has been shown in the preceding section (Part VI) that these major institutions are changing more rapidly now than before. Our interest in change takes us into the study of social change itself as contrasted with a description of changes that have already taken place.

Since the whole superorganic is in process of rapid change, we want to know why it is changing, and what are the processes of change. In 1906 Rivers * wrote a book describing the culture of the Todas, a people of India whose livelihood comes from the buffalo. In the appendix to his book, there is an account of the culture of the Todas three hundred years earlier, written by a Portuguese missionary. It shows that very little change has taken place in three hundred years among the Todas. In the community where the reader lives, however, there have been tremendous changes in less than three hundred years. Why has there been so much change in the United States and so little among the Todas?

In Part VII an attempt is made to supply the answer, insofar as research has made it possible to do so. Chapter 23 traces the processes by which culture

* W. H. R. Rivers, *The Todas* (New York: The Macmillan Company, 1906).

grows, the manner in which it develops, and the forces that impede social change as well as those that foster it. When changes occur, their significance lies, of course, in the effect they have on social life. That changes in one part of culture may be followed by changes in other parts may be obvious; not so evident are the manner in which cultural influence is exerted and the profound degree of the effects, as will be brought out in Chapter 24, "The Social Effects of Innovations."

The direction of social changes is of great importance. Change is inevitable, but it is not always favorable. There are forces at work in every society leading to the breakdown of the established organizations and of the disruption of their functions, producing what are known as social problems. The disruption of the economic organization, for example, brings unemployment and economic misery. The nature and operation of some of the factors responsible for such disruption are considered in Chapter 25, "Social Disorganization." Concomitantly, however, certain counterforces are operative in the community. These forces bring about a working adjustment which permits the group to carry on. Unemployment, for instance, is countered by relief insurance, vocational training, and other aids. Many individuals in modern society are interested not only in easing the strain so that social life may be maintained, but in improving it as well. The idea of social progress is thus introduced. The question of whether man can build a better world in which to live is a fundamental one. It is considered, along with other problems of social reconstruction, in the concluding chapter of the book, "Society and Adjustment."

23

Processes of Cultural Change

If you stand on the top floor of a skyscraper and look down on the roaring city below, you will see many buildings, paved streets, buses, automobiles, railroads, bridges, stores, libraries, colleges, churches, factories, theaters, statues, plazas, playgrounds, and homes. If, being curious, you should ask how all this came to be, the answer you would probably get is that it was all created out of the brain cells in the mysterious gray matter that fills the skull of egotistic man. This is a deceptive answer, for these things were not created all at once. Even though the city may have been a barren plain two hundred years ago, it required a half-million years, more or less, to create what you see below. For the structures that fill a city rest on some inventions made many thousands of years ago, such as the screw and the lever, which were devised in the Ice Ages.

HOW CULTURE GROWS

Culture accumulates. Such a long period of growth means that culture accumulates. The city spread out around the skyscraper exists, then, because culture accumulates. The early tool-maker who flaked stone by pressure added the process to the method of flaking by percussion. To this improvement were added successively, after a long interval of years, methods of pecking, grinding, chiseling, and boring. Eventually bone was used for making tools; antlers and ivory were added to the stock of materials. Then came the hammering of the metals which are found in the pure state, such as copper and gold. To these were added, comparatively recently, the reduction of ores by fire to get the pure metal, like iron, or to make alloys like bronze. Thus culture slowly accumulated.[1]

This principle of growth may be expressed in the language of mathematics as

$$y = a + bx, \text{ or } y = e^x,$$

or

$$y = c + \frac{k}{1 + e^{a + a_1 x_1 \cdots}}$$

but for our purposes here it may be expressed more simply in the nursery rhyme:

> Little drops of water, little grains of sand
> Make the mighty ocean and the pleasant land.

How culture accumulates in modern times is shown by the data in Chapter 1. Another illustration is the number of accumulated patents for the plow sulky, as shown in Table 40. It is not known that all of these patents were put to use, but even if only a portion of them were used, accumulation is indicated.

Growth by addition. The principle of the growth of culture is the same as that of all growth. If the number of new elements added exceeds the number of old elements lost, there is growth; otherwise culture either

[1] N. C. Nelson, "Prehistoric Archaeology," in Franz Boas *et al.*, *General Anthropology* (Boston: D. C. Heath & Company, 1938).

Table 40 · Number of Patents Issued for the Plow Sulky*

Years	Cumulative Frequency
1855–59	35
1870–74	64
1875–79	195
1880–84	359
1885–89	439
1890–94	483
1895–99	499
1900–04	515
1905–09	530
1910–14	541
1915–19	546
1920–23	549

*Adapted from F. Stuart Chapin, *Cultural Change* (New York: Century Company, 1928), p. 359.

remains stationary or declines. The new element that is added to culture is termed an invention when it first appears. After it is in use it is sometimes referred to as a culture trait. In ordinary usage an invention is regarded as something mechanical, an object made of some solid substance. But the term may be extended to include social inventions, for example, a new organization like the juvenile court, or a new folkway like dancing the tango. There are other inventions in the non-material culture, such as the essay in literature.

The accumulative process in the growth of non-material culture is shown by the additions to the federal government of the United States of bureaus, commissions, committees, quasi corporations, departments, and cabinet posts.

The growth of the social heritage may occur either by an increase in the frequency of the use of existing elements, or by the addition of new elements irrespective of the frequency of their use.[2] Culture is, for example, like foreign trade, which grows if the same items are bought and sold in increasing volume or if more new items are added to the foreign market than are withdrawn. However, in the discussion of the growth of the superorganic which follows, the reference is to growth by addition of new elements, unless otherwise stated. The growth of which we shall speak, then, is an accumulation of the elements of culture.

Relatively few elements are lost. Once an invention is made and its usefulness demonstrated, it is not likely to be lost, because language enables the art to be transmitted from one generation to another. Still there is no gainsaying the fact that some losses do occur. Ancient methods of making stained glass are said to have been lost. The making of armor is another example, and still another is the Egyptian process of embalming. These losses are slight, however, compared to the whole stock of human cultures.

There are displacements of culture, too. The use of the bone implements was added to the stone cultures, but the metals in large part rendered both the stone and bone implements obsolete. In a similar manner automobiles have displaced horses in city streets. A horse and buggy on Fifth Avenue would be a strange sight today, but the horse is not wholly replaced by the automobile, especially in rural life.

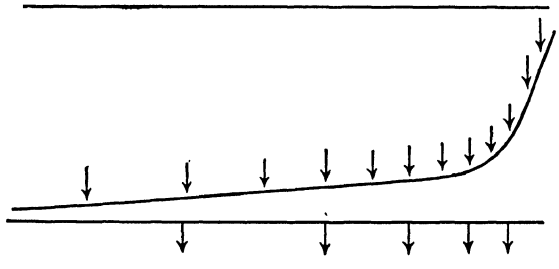
In a small locality like a city or minor state, the rate of loss or replacement is quite great. There is no hunting with bow and arrow in a city, though archery may be practiced by a few inhabitants of city parks as a hobby. Similarly there is no totemism or human sacrifice or cannibalism in a modern state. Yet these practices do exist in different places, so that they are not lost from the social heritage of the world as a whole. Hunting food with stone-tipped arrows is practiced less, both absolutely and relatively, than formerly. Yet as long as a single

[2] For further discussion of the accumulation of culture, the student is referred to F. Stuart Chapin, *Cultural Change* (New York: The Century Company, 1928), Chapter 2.

hunter thus hunts in the Arctic, in the jungles of Brazil, or in the deserts of Australia, hunting with stone-tipped arrows is a part of the total accumulation of the superorganic of the world. A small locality like a city employs only a tiny fraction of the practices of the superorganic as a whole, hence for the city much of the superorganic may be said to be lost.

The process of accumulation is easily seen in material culture, but its operation in the realm of non-material culture is not so obvious, except in the case of scientific discoveries. Among customs and ceremonies and many other traits of non-material culture, the replacement ratio may be higher than it is with inventions in the material culture or scientific discoveries in the non-material sphere. Although it is possible that in earlier times new customs and rituals were elaborated to an even greater degree than material inventions, such is not the case today.

Ours is a great inheritance and growing larger. The principle of the accumulation of the social heritage means that the people born today come into an inheritance far richer than that possessed by those born a century ago. Similarly the Europeans of A.D. 1500 inherited a more extensive culture than Europeans in 1500 B.C. The culture of the Europeans of A.D. 1500 was a gift, not their own creation. A hundred years hence our descendants will inherit a culture that has grown by accumulation to a size much beyond that which we inherited.



251 The Principle of Cultural Accumulation

Where more elements are added than are lost, there is accumulation. The top arrows are symbols of additions, and the bottom arrows symbols of losses to the accelerating stream of culture. The extreme right represents the present time, the extreme left many thousands of years ago. The accumulation is slight at the extreme left of the chart and great at the extreme right. Why we today have universities and libraries and the cavemen did not is explained more by accumulation of culture than by the accumulation of brain cells, for the brain cells were as numerous in Cro-Magnon man as in modern man.

The Principle of Continuity

The growth of culture cannot be appreciated without recognizing that every new culture trait is the outgrowth of existing culture traits. Thus the industrial union of workers, as illustrated by the Congress of Industrial Organizations in the United States, developed out of the experience of trade unions, as illustrated by the American Federation of Labor, that is, the organization of workers by trades. Trade unions based upon common skills evolved from the guilds in the Middle Ages, existing long before the modern factory system. The guilds were grouped by trades based upon skills but were not employee organizations. The trade guilds in turn came from associations of merchants formed in early cities for mutual protection particularly against aggression by feudal barons and their followers. These several social inventions did not spring full blown out of nothing. Rather they represent a succession, one growing out of another.

Inventions, both mechanical and social, often appear to be wholly new. They are, however, only partly new. Much of their composition consists of old elements, as in the above illustration of labor unions.

This principle of continuity lends significance to the old adage "there is nothing new under the sun." A visitor to Paris sees the Arc de Triomphe, that magnificent and

incomparably beautiful arch erected to celebrate the victories of Napoleon, and is moved to comment on the artistic creativeness of the French people. But the French did not create such a monument out of nothing. Further travels to other European cities show that many of them have beautiful arches. The Romans constructed them nearly 20 centuries ago. The Greeks, we are told, festooned the gates to their walled cities to celebrate the return of their victorious soldiers. Triumphal arches have a history.

Again, Fascism seemed to Americans a strange new thing when it flashed on the political scene in the nineteen-twenties; but that was only because we were not familiar with Italian history. The roots of Fascism are found in the traditions of the peninsula, just as the triumphal arch is not without antecedents, but may be traced through a long slow evolution. There is a lesson also for the future; for the things that are to come will grow out of what we have now.

Invention, then, is a step in evolutionary development. Any inventor who makes a significant improvement does so by virtue of the fact that he is standing on the shoulders of a huge giant, the super-organism. "If I saw farther," said Isaac Newton," "'twas because I stood on giant shoulders."

The Principle of Cross-Fertilization

The new element in an invention or discovery in one field is often the result of the union with an idea from another field. Thus Darwin's theory of natural selection was an application in biology of an idea from sociology. Darwin was impressed by Malthus' discovery of population pressure on food supply resulting in a high death rate. This idea, applied to the struggle for existence in the plant and animal world, resulted in the idea of selection of the fittest to survive. Similarly, Woodrow Wilson[3] claimed that the system of checks and balances in the American government, whereby the legislature and the president check each other and the Supreme Court checks both, thus leading to a balanced system, incorporated the idea, widely prevalent among eighteenth-century astronomers, of balance in the planetary system.

Cross-fertilization has long been recognized as a source of new ideas. Unfortunately, students sometimes keep the ideas they learn in sociology classes restricted to that field, and the ideas they learn in biology classes within the confines of that discipline. The departmental divisions in universities and colleges often erect barriers around each discipline which are a hindrance to the free flow of ideas from one subject to another.

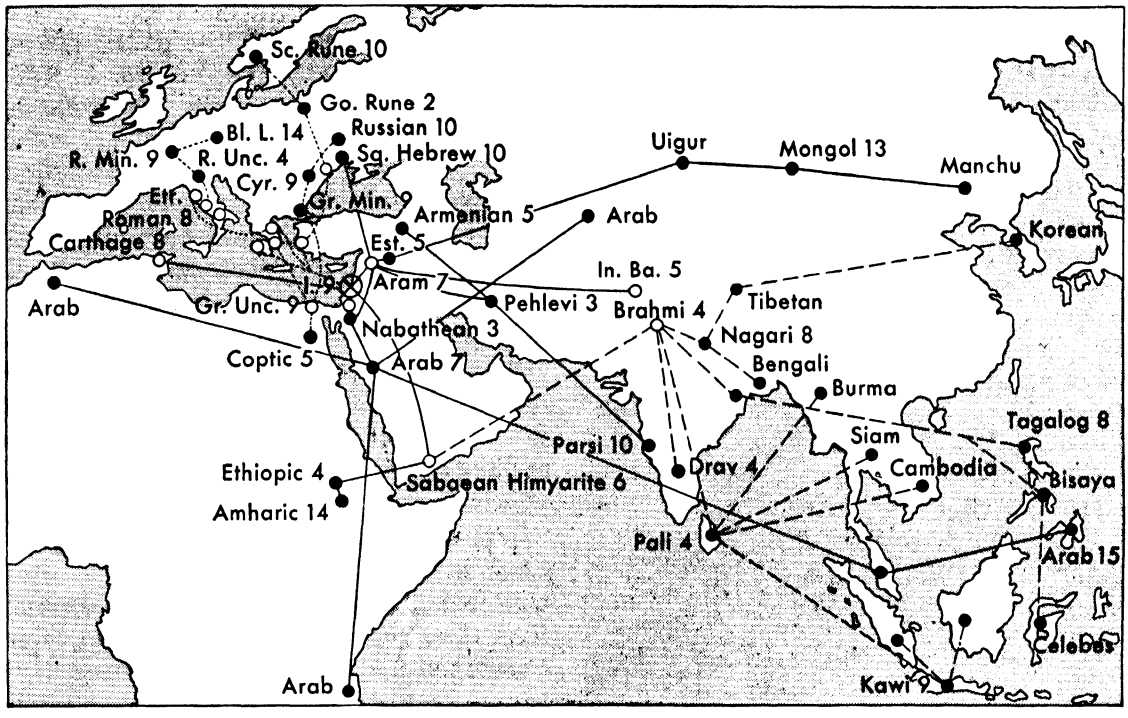
Another way of looking at cross-fertilization is to see it as a process of adjustment of one part of culture to another. Thus the adoption of the factory system led to a social invention, the employer's liability law. This was cross-fertilization, but it was also an adjustment of law to the factory system.

Diffusion

The new ideas for inventions may come not only from different parts of the culture in an area at a definite time, but also from different cultures. The transference of culture traits from one area to another or from one part of culture to another part is called diffusion.

There are few locally invented elements in a culture. In any given area, the number of locally invented elements is only a small fraction of the total culture. This fact is shown in a vivid manner by Linton, who traces the origin of certain culture traits with which an American comes in contact as he starts an ordinary day:

[3] Woodrow Wilson, *Congressional Government* (Boston: Houghton Mifflin Company, 1885, 1925).



252 The Spread of Alphabetic Writing

Alphabetic writing originated in Phoenicia about 1100 B.C. and spread to the outlying places on the Pacific and Atlantic. Many other cultural traits have had a similarly wide dispersal. Thus the culture in one area may benefit by the diffusion of inventions originating elsewhere. Generally the diffusion is greatest to the surrounding neighborhood. (Map redrawn from A. L. Kroeber, *Anthropology*, rev. ed., New York, Harcourt, Brace and Company, 1948, p. 530.)

On the above map, the course of Occidental alphabets is shown in dotted lines; West Asiatic, continuous lines; Indic, broken lines. The numbers stand for centuries: hollow circles, before Christ; with solid circles, after Christ. *Abbreviations:* Aram, Aramaean; Bl L, Blackletter (Gothic); Cyr, Cyrillic; Drav, Dravidian; Est, Estrangelo; Etr, Etruscan; Go, Gothic (Runes); Gr Min, Unc, Greek Minuscule, Uncial; In Ba, Indo-Bactrian (Kharoshthi); I, Israelite; R Min, Unc, Roman Miniscule, Uncial; Sc, Scandinavian (Rune).

Our solid American citizen awakens in a bed built on a pattern which originated in the Near East but which was modified in Northern Europe before it was transmitted to America. He throws back the covers made from cotton, domesticated in India, or linen, domesticated in the Near East, or wool from sheep, also domesticated in the Near East, or silk, the use of which was discovered in China. All of these materials have been spun and woven by processes invented in the Near East. He slips into his moccasins, invented by the Indians of the Eastern woodlands, and goes to the bathroom, whose fixtures are a mixture of European and American inventions, both of recent date. He takes off his pajamas, a garment invented in India, and washes with soap invented by the ancient Gauls. He then shaves, a masochistic rite which seems to have been derived from either Sumer or ancient Egypt.

Returning to the bedroom, he removes his clothes from a chair of southern European type and proceeds to dress. He puts on garments whose form originally derived from the skin

clothing of the nomads of the Asiatic steppes, puts on shoes made from skins tanned by a process invented in ancient Egypt and cut to a pattern derived from the classical civilizations of the Mediterranean, and ties around his neck a strip of bright-colored cloth which is a vestigial survival of the shoulder shawls worn by the seventeenth-century Croatians. Before going out for breakfast he glances through the window, made of glass invented in Egypt, and if it is raining, puts on overshoes made of rubber discovered by the Central American Indians and takes an umbrella, invented in southeastern Asia. Upon his head he puts a hat made of felt, a material invented in the Asiatic steppes.

On his way to breakfast he stops to buy a paper, paying for it with coins, an ancient Lydian invention. At the restaurant a whole new series of borrowed elements confronts him. His plate is made of a form of pottery invented in China. His knife is of steel, an alloy first made in southern India, his fork a medieval Italian invention, and his spoon a derivative of a Roman original. He begins breakfast with an orange, from the eastern Mediterranean, a cantaloupe from Persia, or perhaps a piece of African watermelon. With this he has coffee, an Abyssinian plant, with cream and sugar. Both the domestication of cows and the idea of milking them originated in the Near East, while sugar was first made in India. After his fruit and first coffee he goes on to waffles, cakes made by a Scandinavian technique from wheat domesticated in Asia Minor. Over these he pours maple syrup, invented by the Indians of the Eastern woodlands. As a side dish he may have the eggs of a species of bird domesticated in Indo-China, or thin strips of the flesh of an animal domesticated in Eastern Asia which have been salted and smoked by a process developed in northern Europe.

When our friend has finished eating, he settles back to smoke, an American Indian habit, consuming a plant domesticated in Brazil in either a pipe, derived from the Indians of Virginia, or a cigarette, derived from Mexico. If he is hardy enough he may even attempt a cigar, transmitted to us from the Antilles by way of Spain. While smoking he reads the news of the day, imprinted in characters invented in Germany. As he absorbs the accounts of foreign troubles he will, if he is a good conservative citizen, thank a Hebrew deity in an Indo-European language that he is 100 per cent American.[4]

Most of the social heritage of colonial America was brought here from England, Spain, and other European countries. Some items of the social heritage, such as the potato, maize, types of cooking, and methods of warfare were contributed by the American Indian, though this fact is not generally known. There have been many additions to the culture since then, some of which were invented here, but most of which were imported from other countries. England and France derived much of their culture from Italy. Italy, in turn, borrowed from the Greeks. It was once thought that Greece created her culture, but now it is known that the Greeks borrowed a great deal from Crete, and that Crete got hers in large part from Egypt. Egypt had interchanges of culture traits with those of the valleys of the Tigris and the Euphrates, which in turn received important inventions from the steppes of Russia, which contributed to an early high development in Afghanistan and on the Indus River. India in turn had interchanges with China and Southeast Asia. Clearly there has been a vast amount of borrowing of culture by one region from another.

Isolation a deterrent to diffusion. That a culture in a given locality grows largely by what it imports from other areas is shown by the backwardness of regions that are relatively isolated from other culture areas. These are found in out-of-the-way islands and mountain sections. In some of the mountains of the southern Appalach-

[4] Ralph Linton, *The Study of Man* (New York: D. Appleton-Century Co., Inc., 1936), pp. 326–327. Reprinted by permission of Appleton-Century-Crofts, Inc.

ians in Kentucky, North Carolina, and Tennessee, the handicrafts are practiced as they were in colonial days before the coming of steam, though not quite to the same extent. Some of the families in these regions make nearly everything they consume.[5] In one of these mountain pockets a blind fiddler was found who had lived all his long life in the county. He sang the ballads that were popular in England centuries ago. He was taken to England to sing before King George V, that the ruler of England might hear English as it was spoken in the days of Queen Elizabeth I.

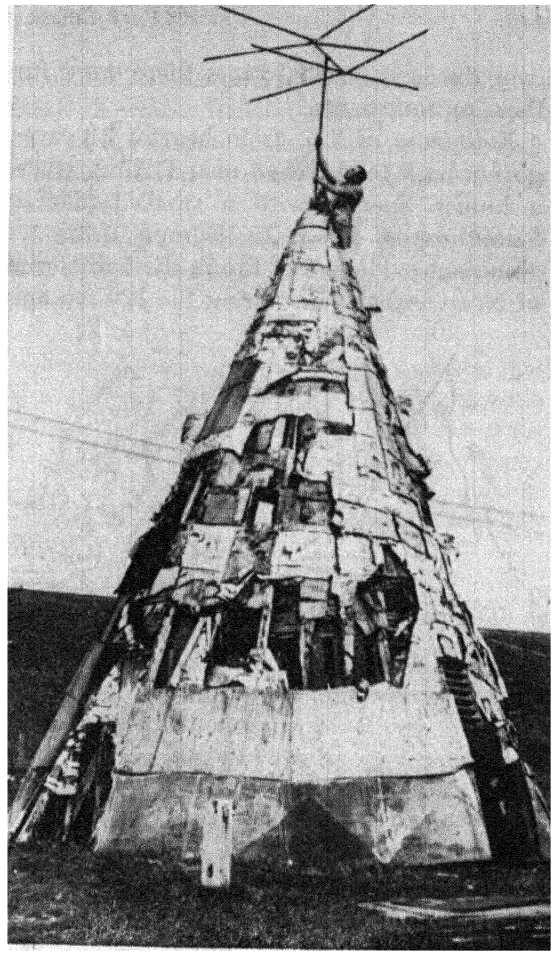
It must not be thought that the culture in such isolated communities is necessarily retrogressive. These peoples have simply not changed as rapidly as have those who are in close contact with other groups. The latter can take advantage of each other's inventions, and need not depend merely on inventions they make themselves.

THE RATE OF CULTURAL GROWTH

The growth of the superorganic was incredibly slow in its early stages. The reference to the lagging development of the social heritage of isolated peoples brings to the fore the important question of the rate at which culture grows.

We have very little evidence to tell us about the growth of culture before the last ice age. Only stones survive. Even bones disappear, except in a few cases. As far back as a half million years ago men or men-like animals were using two kinds of stone implements, probably for digging roots or shaping wood. One type is called the core; the other is the flake which came from the core. The core was a hand axe, and is almond-shaped like the two hands with palms placed together. These cores are found widely scattered over the world, and there were variations from area to area. Over a period of 400,000 years they became longer and more oval shaped and were flaked all over. The flakes underwent a great improvement in shaping in the period between the second and third glaciers. They were shaped with a flat straight edge. Afterwards,

[5] United States Department of Agriculture, *Economic and Social Problems and Conditions of the Southern Appalachians,* Miscellaneous Publications No. 205, 1935.



253 **TV in Tepee**

This picture, which shows Chief White Eagle installing a television antenna atop his authentic old wigwam in the Iroquois village of Caughnawaga on the outskirts of Montreal, illustrates the rapid diffusion of manufactured articles but not of manufacturing. (Photo by Wide World Photos, Inc.)

over the next 200,000 years there were further improvements.

Evidences of fire, as in hearths of caves, go far back to the cave near Peking, where a human species with a small braincase, Sinanthropus, lived. In Europe there are abundant evidences of fire in the habitations of Neanderthal man during the last ice age.

As the flakes off the core stones became more diversified, the use of the core declined. Toward the close of the Old Stone Age (paleolithic), the variety of flakes lessened, and more small flakes were used. The reason probably was that the small flakes with an excellent cutting edge were set in a base. Thus we see flakes replacing



254 Geographical Isolation Slows Cultural Growth

Isolation is so great and climate is so harsh in the frozen Arctic, in the rain forests and jungles of the western Andes, and in the forbidding topography of the Tierra del Fuego that the culture of these areas has not progressed past the hunting stage. The geographical location prevents a passage from hunting to agriculture.

cores, and small flakes reducing the variety. These changes are measured in terms of tens of thousands of years.

Later the superorganic grew rapidly. Following the paleolithic ages came the mesolithic with use of more bone and ivory, and a further reduction in the flakes. Again a substitution of new inventions for older ones. This mesolithic material culture in Europe was much like that of the Eskimo, in the nineteenth century before contact with Europeans.

Following the mesolithic period came the neolithic, about eight thousand years ago in Southwestern Asia. Smooth polished stones were substituted for some of the roughly chipped stones. Shortly thereafter came copper and bronze and then iron. In modern times there is a bewildering variety of metals and alloys in use.

To attempt to give a quick view of the growth of culture, or even material culture, from stones and bone and metals is quite inadequate. But since in the distant past there is no other evidence, we must make what use of it we can. But by studying the culture of the mesolithic Eskimo and the neolithic culture of the American Indians who pursued agriculture, we can guess somewhat at the broader picture of these distant cultures. This inadequacy of stone culture to indicate the whole culture is well illustrated by the neolithic culture. The most significant development of neolithic times was not the polishing of stone, but the raising of food, both animal and plant, instead of hunting for wild food. It is this discovery that gives rise to the phrase, "the neolithic revolution."

This quick view of the growth of material culture shows (*a*) an accumulative process, (*b*) a partial substitution of the new for the old, and (*c*) an acceleration of the accumulative process through invention and increasing rapidity of change. In the beginning of the Pleistocene age, changes were measured, it seems, in hundreds of thousands of years. In later paleolithic times, in tens of thousands; in neolithic, in thousands of years; and in modern times, in decades or annually.

Lowie has expressed this change in the rate of accumulation in the following metaphor:

> We may liken the progress of mankind to that of a man one hundred years old, who dawdles through kindergarten for eighty-five years of his life, takes ten years to go through the primary grades, then rushes with lightning rapidity through grammar school, high school, and college.[6]

Causes of Changes in Rates of Growth

Relation between existing knowledge and rate of invention. One cause of the growth of culture is the functional relation between the existing body of knowledge and the rate of invention. Any invention depends for its inception upon the existence of elements that make up the invention. The invention of the airplane depended on the knowledge of the gasoline engine. The invention of calculus depended on a knowledge of analytical geometry. The invention of the "direct primary" depended upon the invention of democratic elections. So also shaping a stone by flaking depended on a knowledge of breaking a stone by striking.

Indeed, an invention may be further defined as a combination of known elements into a new element. The telegraph is a combination of battery, electromagnet, and wire. The juvenile court is a combination of procedures of courts, of truant officers, of probation, of schools, and of psychological clinics. Since an invention is made up of existing elements of knowledge, any particular invention can be made only if the elements which go to make it up are known.

[6] Robert Lowie, *Culture and Ethnology* (New York: Douglas C. McMurtrie, 1917), p. 78.



255 **Biological and Cultural Change**

There is no evidence of any significant change in biological man from Cro-Magnon days to the twentieth century, but man's culture has grown tremendously. Culture seems to grow whether or not there is any biological change in man.

Figure 257 shows how six important inventions, known as the Selden patents, were combined into one new invention, the automobile. The diagram furthermore shows how some of these six were the result of other and earlier combinations. This illustration is from mechanics. Figure 258 is an illustration from social science, showing how a social invention, the commission form of city government, was invented in 1900 from a combination of existing elements. It also shows how improvements were made in 1905 and in 1908 in this social invention.

The cave man was an infrequent inventor. At least one reason was that he had so little knowledge and there were so few cultural elements out of which to make an invention. Modern man is a frequent inventor because he has so much knowledge, especially in such fields as mathematics, physics, chemistry, and other sciences; and there are so many elements of culture which he can put together into new combinations. Modern man would be a greater inventor than the cave man even if they both had the same inherited mental ability, because in modern times there is more accumulated knowledge.

The exponential principle. The facts of the growth of the superorganic conform to the general theory that a positive correlation exists between the number of inventions made at any given time and the size of the existing accumulation of old culture traits. In paleolithic times, the accumulation was small, and the inventions were few. But some inventions were added, so the number of cul-

tural elements grew. As the accumulation became larger, more innovations were made and the stock of existing knowledge piled up faster. The speed seems to have been accelerated so that the movement became faster and faster as the body of knowledge got larger and larger.[7]

This general description conforms to the exponential curve, like that for the growth of compound interest. Suppose, for instance, a sum of $100 draws 5 per cent interest, added annually. The principal increases slowly at first as the interest is added, $105 at the end of the first year, $110.25 at the end of the second year, $115.75 at the end of the third year. The increase is little more than $5 a year in the early years. But in the course of time the interest becomes very great each year, as does the principal. At the end of 100 years the interest added is around $1000 a year, instead of $5.

The amounts of interest if plotted in a chart would show an increase each year a little larger than the increase the year before, and hence the curve would be concave. We call it an exponential curve because the formula, $P_n = P_0(1 + r)^n$, for computing compound interest has an exponent, n.

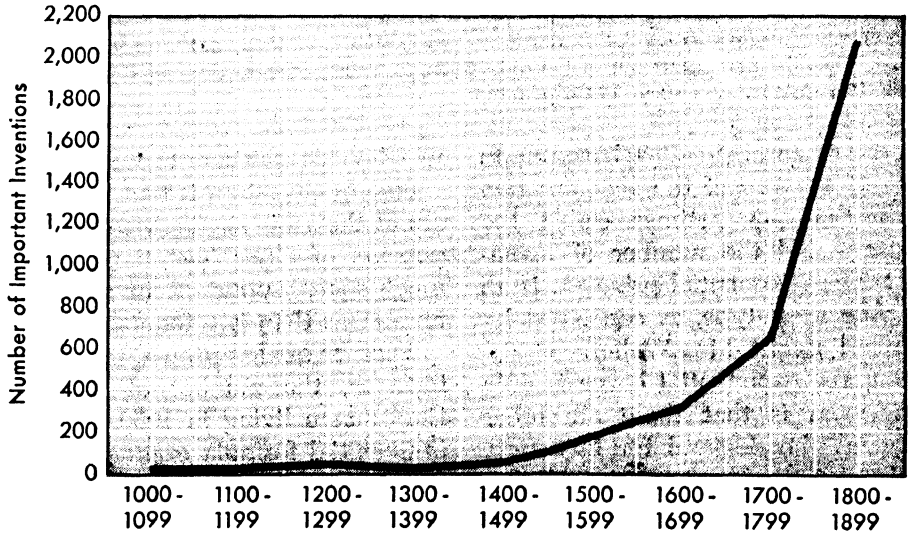
In a similar manner, if one culture had 10,000 elements and produced one invention in a given time, then a culture with 10,000,000 elements would produce 1,000 inventions. Even if the rate continued the same, the added inventions, like the interest in compound interest, would become greater and greater with each successive unit of time and would thus follow a concave curve such as that shown in Figure 256.

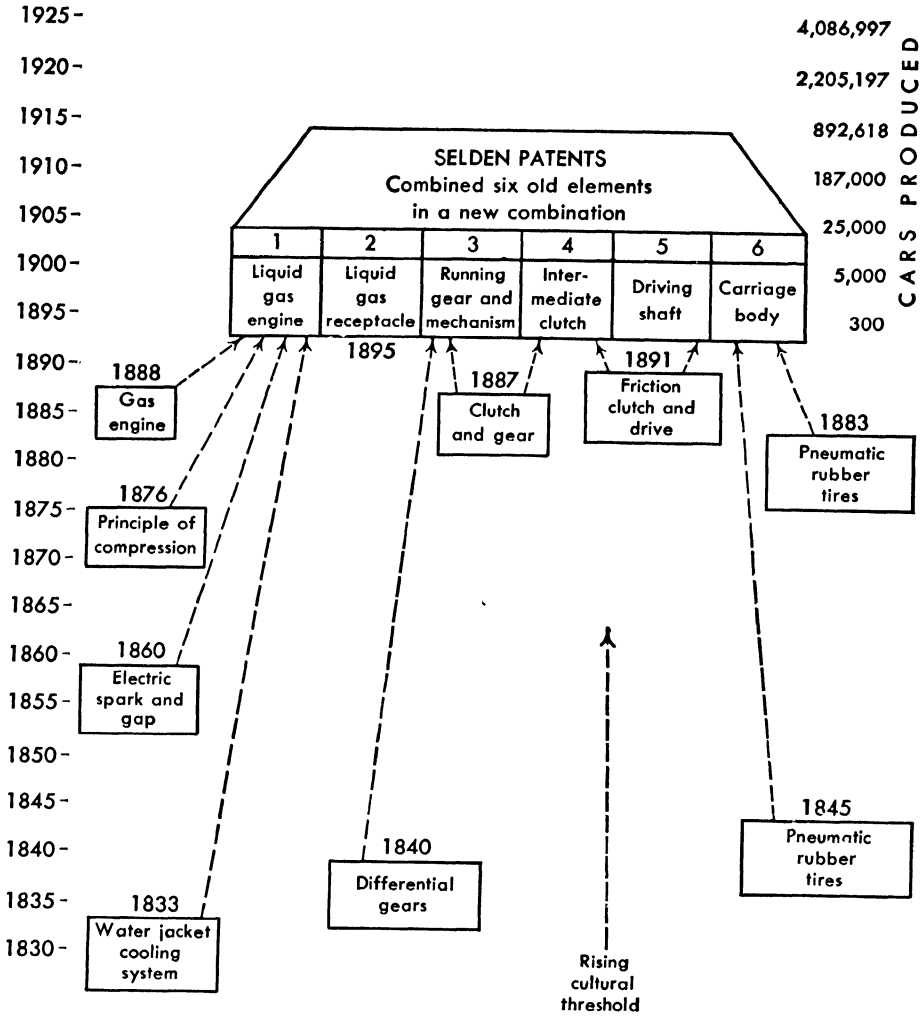
The exponential curve only an approximation. The foregoing statement of the growth of inventions at an exponential rate because of an accumulation like that of com-

[7] W. F. Ogburn, *Social Change* (New York: The Viking Press, 1928).

256 Important Inventions and Discoveries from 1000 A.D. to 1900 A.D.

In the early centuries of the last millennium less than ten important inventions and discoveries were recorded, while in the last century there were more than two thousand. Even if a number of the important inventions of the early years were omitted, there still would be a remarkable acceleration of growth. These inventions and discoveries are, of course, only one phase of culture, but they suggest a process of growth for all culture. (Compiled from L. Darmstaedter and R. Du Bois Reymond, *4000 Jahre Pioneer-Arbeit in den exacten Wissenschaften*, Berlin, J. A. Stargart, 1904.)





257 **Mechanical Invention as a Combination of Known Elements**

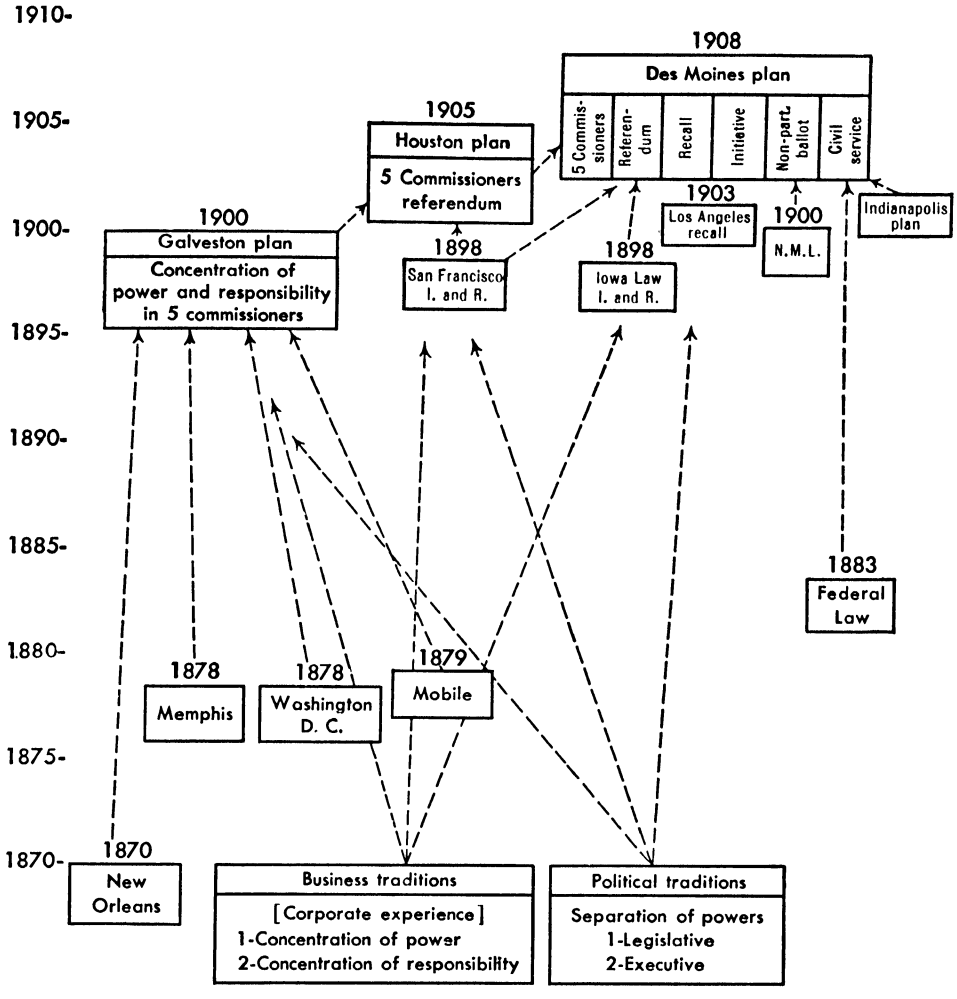
The automobile was composed of a few important existing inventions, as shown in the above chart. Thus the new grows out of the old. (From F. Stuart Chapin, *Cultural Change*, New York, The Century Company, 1928, p. 336.)

pound interest is an abstraction based upon the relation of the size of the accumulation at any one time — sometimes called the cultural base — and the number of inventions made. The exponential principle is an example of the ideal type, as conceived by the German sociologist, Max Weber.

The reason the exponential curve is only an approximation is that there are other factors, such as the demand for invention, and possible variations in inventive ability, which cause the rate to fluctuate.

One qualification is that not all inventions are of the same significance as possible components of other inventions. A dynamo is much more important in stimulating other inventions than is a fountain pen.

Another qualification is set by reality. For instance, the number of ancestors of an Englishman living in 1950, according to an exponential formula expanding in the series 2, 4, 8, 16 . . . , would have been at the time



258 **Social Invention as a Combination of Known Elements**

The commission form of government, invented in Galveston in 1900, was a combination of previously existing elements. It evolved into the Houston plan in 1905, and was improved to make the Des Moines plan in 1908. (From F. Stuart Chapin, *Cultural Change*, New York, The Century Company, 1928, p. 339.)

of William the Conqueror, around 2 billion. Yet the total population of Britain at that time was less than 2 million. The "reality" that depressed the exponential increase in ancestors was inbreeding and the size of the island. Raymond Pearl[8] bred flies in a milk bottle, but the size of the milk bottle caused the concave curve to flatten out. Hornell Hart[9] has made extensive studies of growth curves of economic and social phenomena for the United States and for Europe, and finds a large proportion of his curves are like Pearl's. They go up like a

[8] Raymond Pearl, *The Biology of Population Growth* (New York: Alfred A. Knopf, Inc., 1930).

[9] Hornell Hart, *The Technique of Social Progress* (New York: Henry Holt & Co., Inc., 1931); *Can World Government Be Predicted by Mathematics?* (Ann Arbor, Mich.: Edwards Brothers, 1943); "Logistic Social Trends," *American Journal of Sociology*, 50: 337–352, March 1945; "Depression, War and Logistic Trends," *American Journal of Sociology*, 46: 112–122, September 1940.

concave curve for a while and then flatten out, making a curve like an elongated capital S that leans forward. Hart concludes that cultural phenomena grow in a series of surges, one S curve following another. The series of surges suggests that the growth of culture is cyclical — fast, slow, fast, and so on. But the point here is that no exponential curve can continue indefinitely, except in the mind of the mathematician. Reality, one way or another, bends it.

We have been speaking of the growth of the superorganic as a whole. When we break it into parts, there are other qualifications to its exponential growth.

We may divide culture into two parts: material culture, such as mechanical inventions; and non-material, such as social institutions and ideologies. Most of the observations made by measurement have been of material culture, such as the number of patents. Hence we do not have as good evidence that the non-material culture grows by the exponential curve or that its growth in modern times is at as great a rate. Certain types of social researches seem to grow exponentially, but there is some doubt about the rate of growth of other social phenomena, as, for instance, religious rituals in recent times.

We may also divide culture into parts geographically. Thus there is a culture in Japan and one in Greece. The growth in any particular area when there is a good deal of contact with the outside is not alone from the cultural base in that area but by diffusion from outside. When inventions come in from the outside, the rate of growth may still be exponential, but at a faster rate than if the inventions came solely from the accumulation within that area. Thus Japanese culture grew very rapidly by importing inventions from the west after 1854, when Commodore Perry broke down Japan's commercial seclusion. The inventions, social and mechanical, which are imported are, of course, unequal. Some are important and some not; thus the growth may be by surges.

Other factors in invention besides the existing culture traits. We have been discussing the very great importance of the existing culture base in the number of new inventions produced. The existing accumulation, which furnishes the materials with which to invent, is a factor in determining not only the quantity of inventions, but also their nature. Thus the railroad could not have been invented without the steam engine. This factor of the culture base — the existing accumulation of materials, knowledge, and ideas — is of very great importance. But it is not the only factor. There are two others: demand and inventive ability.

The factor of the demand for inventions. Necessity is said to be the mother of invention. Yet necessity does not always produce an invention. The American Indians had perhaps a greater demand for medicine than their white successors. Yet the Indians developed only one or two useful herbs — quinine, for instance. They did not have the accumulation of knowledge to make the desired medical discoveries. Again, one may argue that the need for a mechanical cotton-picker was as great as the need for a cotton gin; yet there was more than a century between the two inventions. We need very much a social invention to control the use of the atom bomb, but it has not yet been made.

Demand as distinguished from need does, however, often account for the kinds of inventions made. The Pueblo Indians value the dance very highly, as do many primitive peoples. They have, as a result, a great variety of dance forms and practices. The Australian aborigines turned their attention to religious practices, and religious rituals proliferated. The same phenomenon may be observed in the college curricula. In the

early days of American colleges, many students became preachers; hence the curricula accentuated courses in ethics, the Bible, etc. Then a shift in interest developed the natural sciences, and now the social sciences are growing rapidly.

On the other hand, our cultural base is now so large, and we have so much in the Western World with which to invent, that invention is often the response to need. Thus when we needed to dispel or overcome fog over airports, there appeared rather quickly twenty-five different [10] ways of doing it. On the other hand, we have not yet discovered a cure for cancer, though there is great demand for such a cure.

Mental ability as a factor in inventions. In addition to demand and to the cultural accumulation, a third factor in invention is mental ability. It is generally appreciated that mental ability is needed to make an invention. Not any ordinary group of men could have split the nucleus of the atom.

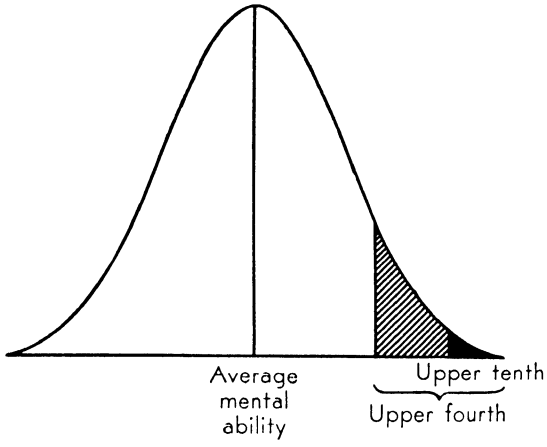
Mental ability is a composite of heredity and learning, but we cannot say in what proportion. Learning is a small factor in the intelligence of the feeble-minded, and heredity is an important one. As a factor in invention, we discuss only that mental ability which is inherited; for the intelligence that is due to learning includes the other factors of demand and cultural accumulation. Professor Hahn and Dr. Leitner split the nucleus of uranium in 1939, the year that World War II began. (Many know the war began in 1939, but few know that in that year the nucleus of the atom was split. Yet which was the more important event?) The mental ability of Herr Hahn and Fraulein Leitner was dependent upon their learning. We do not know for certain that at birth their inherited mental capacity was even above normal. The Federal Reserve Banking System of the United States was invented by Senator Carter Glass, a very intelligent man. He was a great student of banking, but we do not know that the structural basis of his intelligence at birth was greater than the average.

It is necessary to distinguish between inherited mental capacities and learned abilities. It is assumed that some individuals have a greater native capacity to invent and others less, much as some persons are tall and others short. The distribution of most biological phenomena, simple or complex, is in the form of a normal frequency distribution. If the inherited inventive capacity of a large number of persons could be measured and plotted on a curve, it would be bell-shaped with those of average capacity in the middle, much as in the case of the distribution of stature. If a position in the upper half of the curve were the sole prerequisite to being an inventor, then there would be in the United States 85,000,000 potential inventors. If, however, inventors should be found only in the upper tenth of the scale, then in the United States there would be 1,410,000 persons with the requisite inherited mental power.[11] Even if inventors were drawn only from the extreme upper one hundredth of the scale there would still be 230,000 potential inventors. It is concluded therefore that in most large populations of the same race there is a surprisingly large number of individuals with inherited capacity sufficient to be inventors.

Yet the number of inventors is small. The reason is that all the individuals with sufficient inherited capacity are not trained to invent; nor does society encourage invention on the part of all those who are properly

[10] S. C. Gilfillan, "The Prediction of Inventions," Chapter 2 in *Technological Trends and National Policy* (Washington, D.C.: Government Printing Office, 1937), p. 22.

[11] W. F. Ogburn, "The Great Man Versus Social Forces," *Social Forces*, 5: 226, December 1926. These numbers are simply the area of a segment of the normal frequency curve, the total area of which is the total population of the United States.



259 The Commonness of Inherited Inventive Ability

The black area represents .8 per cent of the total area under the curve, and the shaded and black areas together represent 6.7 per cent of the total area. If a biological trait of inherited mental ability were measured on a line from the least to the greatest, then the people of the mental ability represented by the upper tenth of the line would constitute about .8 per cent of the total area. If hereditary inventive genius occurred only in the upper half of the normal curve, then in a country like the United States, with its 170,000,000 people, there would be 85,000,000 inventors. If such genius existed only in the upper tenth of the range, there would be about 1,410,000 inventors. If a position in the upper quarter of the range of inherited mental ability were required, then there should be about 11,000,000. Clearly, other factors besides inherited mental ability enter into becoming an inventor.

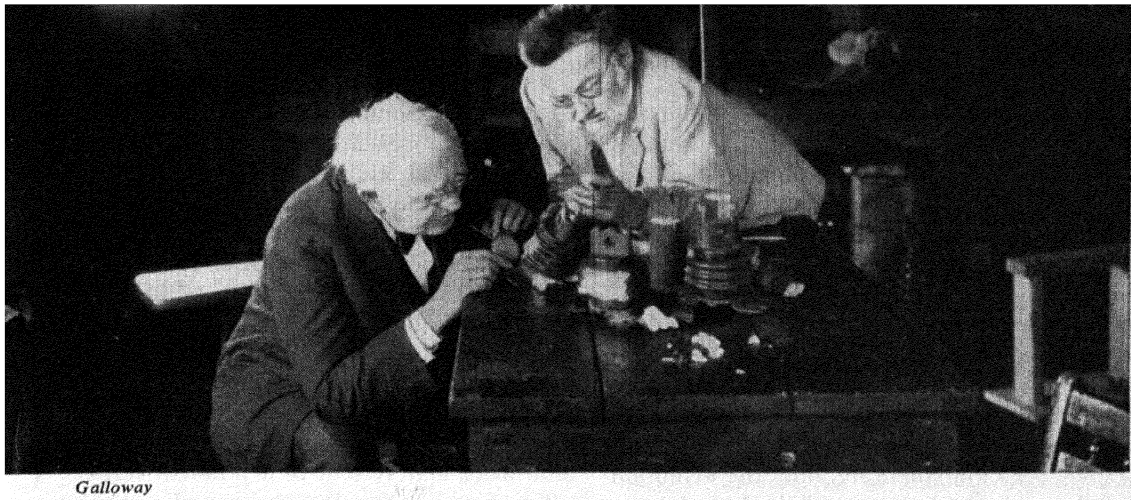
trained. Thus, in anthropology, there are numerically few research workers who are making scientific discoveries. Theoretically, if inventors are found in the upper half of the curve of mental ability in the United States, there might be 85,000,000, so far as inheritance is concerned. But the time and money required to produce Ph.D.'s in anthropology cut the number down, and then the demand for anthropologists is relatively so slight that society will support only a few. So it is in other fields. Besides, there are things for men to do other than the making of inventions.

In any large population, then, the scarcity of invention is due to lack of attention given to invention, rather than to a scarcity of inherited ability. Since the inherited bases exist, invention could be stimulated by more educational training and application. One hesitates to attribute the scarcity of invention per capita in one country as compared with another to lack of inherited mental ability. The number of inventions per capita is very much greater in Switzerland than in Iran; [12] but the reason is not likely to be found in the variations in the inherited mental ability of the two peoples, who belong to the same race, though to different subraces. Iran may have fewer inventions because less attention is given to the training and application of inventive ability, or because of a cultural base which contains fewer elements that go to make an invention. The variation in inherited mental ability from region to region is likely to be less than the variation in social valuations or in the supply of component inventional elements. By similar reasoning it is argued that the rate of progress, that is, cultural change, can be accelerated by increasing the support and training of inventors.

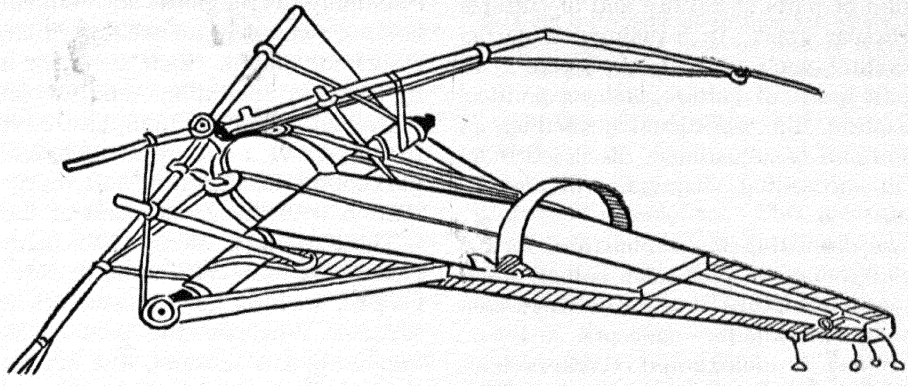
Inherited mental ability in large groups may be a constant since the time of the ice ages, or longer, and indeed it may be a constant by large areas at any one time. If so, then explanations of differences in inventiveness would be in terms of the cultural base or in terms of demand. Within a group, as between individuals, mental ability is not a constant, but an important variable.

Despite the qualifications and the other factors just discussed, the actual growth of culture appears in the past to have approximated the exponential rate as seen in Darmstaedter's data on inventions shown in Figure 256; as observed in previous chapters on the evolution of culture from the early Pleistocene period; as cited in the

[12] S. C. Gilfillan, "Inventiveness by Nation," *Geographical Review*, 20: 301–304, 1930.



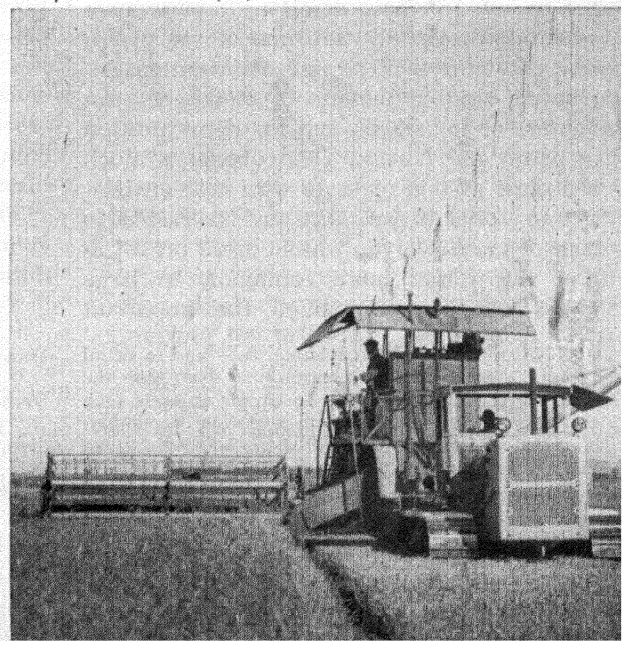
Galloway



Caterpillar Tractor Company

260 Three Factors in Invention

Inherited mental ability; the supply of knowledge and materials necessary for invention; and the social demand for the invention. America's greatest inventor, Thomas Edison, was probably gifted by nature as an inventor. Da Vinci worked at the invention of an airplane, but since the subsidiary inventions that go to make up the airplane, such as the internal combustion engine, were not then in existence, he could not invent the airplane. For half a century there was such a demand for the harvesting machine that scores of inventors worked at it.



charts of Chapter I based on Lehman's studies; as developed by Kroeber in his famous paper, "The Superorganic"; and as noted in the quotation from Lowie on page 643.

THE GROWTH OF CIVILIZATIONS

Readers who are curious to know how our civilization came to be, will find the explanation in terms of the principles of invention and accumulation set forth in the preceding sections of this chapter. These same principles help to explain not only the evolution of the superorganic as a whole, but also the evolution of parts of culture and of cultures in particular areas. In explaining a particular culture such as that of Greece [13] or particular parts of culture such as political organization, the additional principles of diffusion and of adjustment, discussed more fully in succeeding chapters, will also be helpful.

Before discussing the explanatory factors of social change in particular culture areas or in parts of culture, it is desirable to consider a few introductory concepts.

What is civilization? Writers have many different concepts of civilization. The authors of this book think of civilization as the recent development of the superorganic since approximately the time of the inception of a cluster of significant inventions including writing, the use of metals, the invention of the wheel, and the domestication of cattle and horses. This concept is much the same as that of those who base civilization on civil organization as contrasted to clan or kinship organization. Civil organization was found more commonly in large towns which accompanied the important cluster of inventions just cited. However, A. A. Goldenweiser [14] made the word *civilization* more or less synonymous with *culture* and applied the term to nonliterate peoples.

Others reserve the word *civilization* for some selected part of a culture. Thus Brooks Adams [15] thinks of civilization as being essentially a highly developed political organization. His concept implies order maintained over an area by governmental power. Thus the decay of civilization would be the weakening of a government's ability to maintain order and system in a political state.

To Arnold Toynbee,[16] a civilization is essentially a religious and ethical system holding sway over an area often larger than a state or nation. Such a system is unified by customs, institutions, and ideologies.

Oswald Spengler [17] emphasized the creative aspect of a culture in such fields as art, philosophy, scholarship, and music in connection with the government of the state.

These writers, along with many others, confine the term *civilization* to only a part of culture, such as government, art, ethics, or religion. Whatever the part of the superorganic that is selected, it is not treated objectively but is endowed with values and rated, for example, as higher or lower. These values are often contrasted with those of savagery or barbarism. Thus to Pitirim Sorokin, the important values of civilization are what he calls sensate and ideational values, which often alternate in a culture area through long stretches of history.

These selected parts of culture, called civilization, are, of course, different from culture as a whole. The concept of civiliza-

[13] No culture is to be explained fully and in detail without a great deal of research, and even then the data may be inadequate, as in earlier cultures such as Persia. But the factors of invention, accumulation, exponential growth, diffusion, and adjustment can be developed into a probable explanatory hypothesis.

[14] A. A. Goldenweiser, *Early Civilization* (New York: Alfred A. Knopf, Inc., 1922).

[15] Brooks Adams, *The Law of Civilization and Decay* (New York: Alfred A. Knopf, Inc., 1943).

[16] Arnold J. Toynbee, *A Study of History* (London: Oxford University Press, 1947).

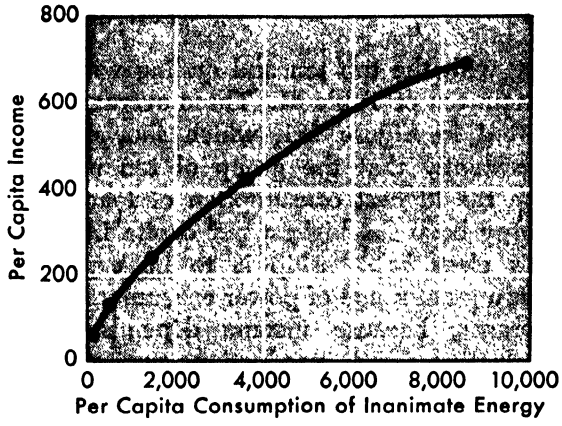
[17] Oswald Spengler, *The Decline of the West* (New York: Alfred A. Knopf, Inc., 1939).

tion as a set of ethical values is different, too, from an objective concept of culture. The whole culture of a people at any one time is a particular configuration of its parts: material culture, family organization, economic organization, political organization, custom, religion, philosophy, science, art. The patterns which these make are highly varied. India, China, Egypt, Greece, Rome — all had different configurations.[18]

The ranking and comparisons of cultures. When is a civilization great? The answer depends upon the values that each individual uses in his concept of greatness. To some the civilization of the United States is great because of its mechanical power. To those who value art or music, religion or philosophy, it is quite inferior to many earlier cultures.

We do rank cultures sometimes on the basis of the efficiency of some one achievement, as for instance, the tools of production. Thus there are hunting cultures, hoe cultures, plow cultures, and cultures based on mechanical power. Carleton S. Coon[19] has a very useful ranking on the basis of complexity.

A ranking of states on the basis of the per capita use of mechanical power is shown in Table 41. The United States has the highest ranking, with Canada second and Britain third. Haiti, Burma, and Indonesia are the lowest of the fifty states. The use of inanimate energy is significant for what it implies. One implication is that the greater the amount of such energy consumed, the higher is the production and hence the money income; and the greater the amount of goods and services bought, the further away the people are from poverty. In Table 41 is also shown the ranking of the same fifty states in per capita income as expressed in



261 **Consumption of Inanimate Energy and Per Capita Income of 50 Countries, 1949**

Each dot is the average consumption of energy for 10 countries ranked in order of amount consumed and also the per capita incomes for these same 10 countries. Energy consumption is measured by equivalent pounds of coal and income is shown in 1949 U.S. dollars.

United States dollars. This measure is not perfect in showing comparisons of what the money will buy; but within limits it can be used as an index. The table shows that in general the high-energy nations[20] are the ones with a high plane of living, though there are exceptions. Switzerland, for instance, ranks third in per capita income but eleventh in energy consumption, whereas Norway ranks fourth in use of energy and is only ninth in the income ranking. These comparisons reveal the limitations of energy consumption as a measure of technological development. For instance, the amount of mechanical energy per dollar of product value in making pulp out of forests is much greater than in watch-making. These special variations from nation to nation are somewhat eliminated if we get averages for groups of ten nations in each group, begin-

[18] A. L. Kroeber, *Configurations of Culture Growth* (Berkeley, Calif.: University of California Press, 1944).

[19] *A Reader in General Anthropology* (New York: Henry Holt & Co., Inc., 1948).

[20] In this connection, see Leslie White, *Science of Culture* (New York: Farrar and Straus, 1949), Chapter 13; William F. Cottrell, *Energy and Society* (New York: McGraw-Hill Book Company, Inc., 1955); George Lundberg, *Foundations of Sociology* (New York: The Macmillan Company, 1939).

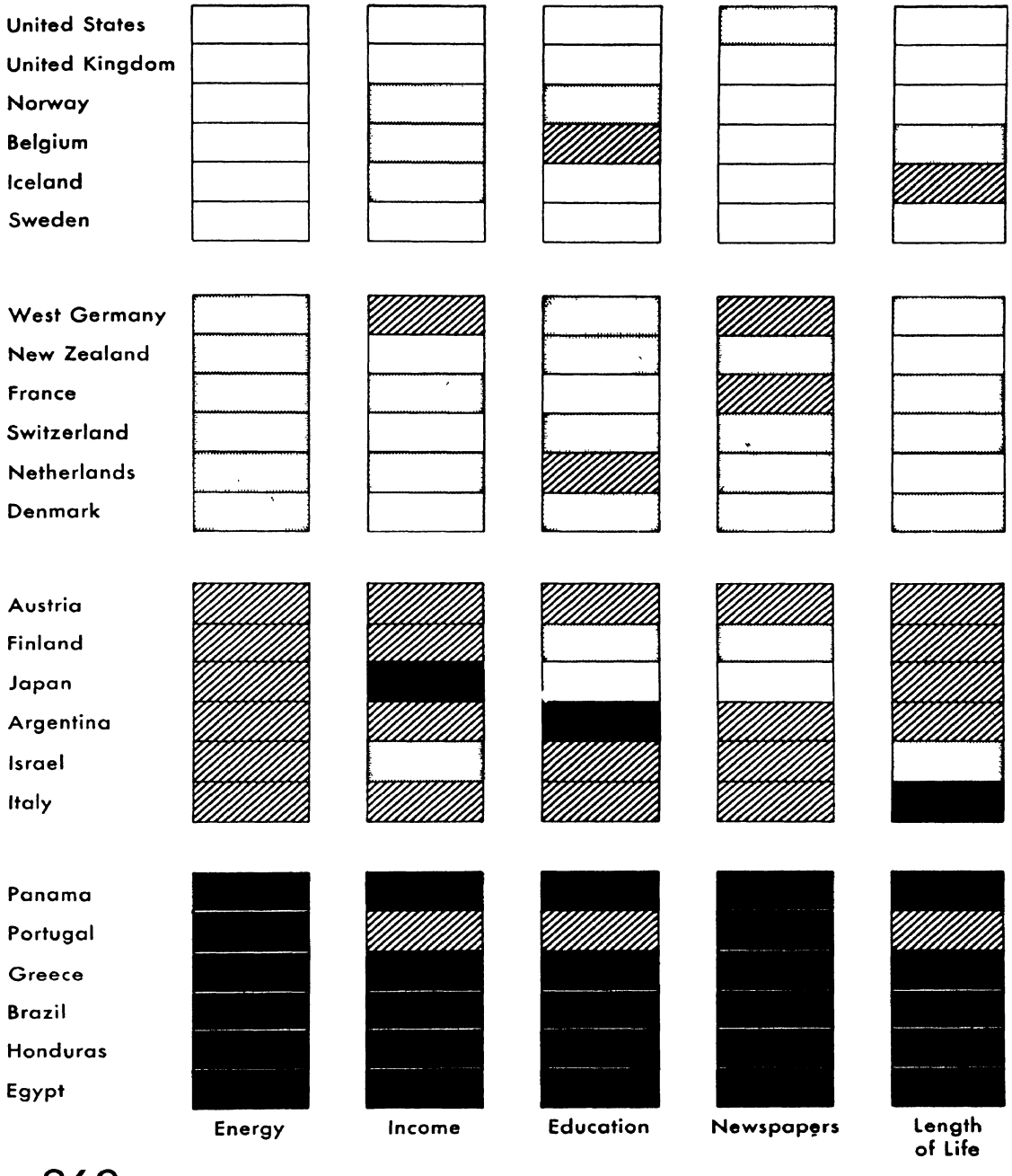
ning with the top ten and ending with the bottom ten of Table 41. These averages are plotted in Figure 261, which shows quite consistently that the group of ten nations with the highest consumption of inanimate energy have the highest per capita income. This close relationship is to be expected over a great range of power consumption for averages, because income depends upon production, and production per worker varies greatly according to the degree that the worker is assisted by power-driven machinery.

For a smaller number of states we have been able to make a ranking on the basis of education, length of life, and newspaper circulation, as shown in Figure 262. The twenty-four nations for which data are available were ranked and then divided into four groups. The darker the shading in the figure, the lower is the rank in average expectation of life at birth, in newspaper circulation per capita, and in the percentage of children in secondary schools of appropriate ages for attending such schools. The extent that the rankings are similar can be measured by a coefficient of rank correlation which is of the order of .8 for the correlations of the various rankings with the per capita consumption of inanimate energy, and also with the per capita income. If data were available for rankings in painting,

Table 41 · Ranking of 50 Countries in Per Capita Consumption of Energy and in Per Capita Income*

Country	Energy	Income	Country	Energy	Income
U.S.A.	1	1	Israel	26	15
Canada	2	2	Mexico	27	35
U.K.	3	5	Uruguay	28	19
Norway	4	9	Italy	29	26
Belgium	5	10	Cuba	30	22
Iceland	6	13	Yugoslavia	31	30
Australia	7	8	Panama	32	29
Sweden	8	6	Colombia	33	31
Czechoslovakia	9	16	Turkey	34	33
West Germany	10	20	Portugal	35	25
New Zealand	11	3	Costa Rica	36	34
France	12	12	Greece	37	32
Poland	13	21	Brazil	38	36
Switzerland	14	4	Iraq	39	40
Union of South Africa	15	24	Honduras	40	42
Netherlands	16	11	Ecuador	41	47
Denmark	17	7	Egypt	42	39
Austria	18	27	India	43	44
Finland	19	17	Ceylon	44	43
Ireland	20	14	Nicaragua	45	41
Hungary	21	23	Bolivia	46	45
Chile	22	28	Pakistan	47	46
Japan	23	38	Indonesia	48	50
Argentina	24	18	Burma	49	49
Southern Rhodesia	25	37	Haiti	50	48

*The rankings are from data taken from J. Frederic Dewhurst and Associates, *America's Needs and Resources* (New York: The Twentieth Century Fund, 1955), p. 1099. The data are for 1949; the energy is from all mineral fuels and water power measured in the equivalent of pounds of coal, and the income is measured in U. S. dollars.



262 Civilizations Ranked by Different Indices

The index of energy is the per capita consumption of energy from mechanical fuels and waterpower from Dewhurst, *America's Needs and Resources,* pp. 1099, 1100. Income is per capita income in U.S. dollars, from Dewhurst. Education is the number of pupils enrolled in secondary schools divided by the number of youths in the population 14–17 years of age, compiled from the *United Nations Statistical Yearbook* and *Demographic Yearbook,* 1955. From the same source come the figures for expectation of life and the per capita number of copies of newspapers, issued at least four times a week and of varying numbers of pages. The data are generally from around 1950–1953.

music, poetry, crime, or even happiness, the rankings might not be so similar.

These remarks are pertinent to a comparison of civilizations. Was the civilization of ancient Greece greater than that of Greece today? If creativeness in art, government and philosophy be the test, perhaps so. If the measure be the accumulation of culture traits perhaps not, for the accumulation is very large today. A school child today can do problems in mathematics that Aristotle could not do. It is much easier to multiply 10357 × 625 than to multiply MTNH by XKN.

The comparison of the same culture at different times is often confused with the ranking of a culture at any one time in competition with other cultures. The culture of the Italian peninsula, for example, occupied first rank for a long time. Although the culture of that area is now far from first place, it is not inferior to what it was when it held top rank. These considerations of the rank and comparison of cultures are necessary to an appreciation of the growth of particular cultures.

The growth of particular cultures. A particular culture grows by invention and accumulation as does the superorganic as a whole; but the inventions often come into the area by diffusion, and the new, imported inventions in turn require adjustments which result in further innovations.

Ancient Greece was very favorably situated for importing bronze, iron, the wheel, the domesticated horse, the alphabet, and the sailboat — all of which were important inventions occurring about that time. Travels to other lands brought new ideas about religion, art, customs, and government. The distances to the lands with these important new inventions were not great for the boat and horse. Taken over by Greece, the inventions in turn modified the existing ideologies and material culture. The adjustment to these innovations and inventions meant many new inventions and creations by the Greek people.

In such a situation, with so many significant inventions and ideas to be imported from near by, a culture around the Aegean Sea would probably have grown just as rapidly if the native peoples had been black, yellow, or red instead of white.

Creativeness, which is often acclaimed as the test of a "civilization," comes no doubt from many causes, but a significant factor is the presence of new inventions which stimulate other inventions. Thus, adoption of the new inventions of steel and steam in a country with coal and iron means that wooden hand tools will be replaced by larger metal ones run by mechanical power. The result will be much creativeness in material culture. The United States is such a country. In a similar way the Renaissance experienced a burst of creativeness in non-material culture because of the diffusion of stimulating ideas from the cultures of ancient Greece and ancient Rome, and because of trade with the Near East.

Various theories have been presented to explain the growth of particular cultures. Toynbee emphasizes the psychological factor in the growth of a civilization. He sees the environment presenting a challenge. Some peoples respond to it constructively, others do not. The building of a culture rests therefore, according to Toynbee, on the moral qualities of a people. Spengler thinks the creative civilizations run a cyclical course somewhat inevitably after the manner of the seasons of the year. Sorokin sees an alternation of two principles throughout history in different cultures, the pursuit of goals of the senses and the pursuit of goals of the spirit. Brooks Adams places his emphasis upon the economic factor in the growth and decline of civilizations. These writers are dealing with valuations and selected parts of culture, whereas we are discussing the whole culture of a people or an area.



263 Early Inventions Around the Aegean Sea

Many hundreds of years before Christ, important inventions were diffused into the culture area around the eastern end of the Mediterranean Sea. These included: (1) domesticated cattle, (2 and 4) iron implements, (3) bronze, (5) the wheel, and (6) the alphabet, all of which gave a very great impetus to the development of culture in this region. Generally, the further advanced a culture is, the more rapidly it grows. (Adapted from drawings in Arthur Evans, *The Palace of Minos at Knossos*, London, Macmillan and Company Limited, 1935.)

In dealing with a selected part of the superorganic, it must be remembered that the various parts of a culture are interrelated. Sometimes the fit is a very happy one. The configuration is a nice blending of parts. Thus a government may maintain an army which may make conquests and levy tribute; and with transportation trade may grow which in turn stimulates home production which helps trade and provides a class with leisure to pursue art and learning. This pattern may be upset by a significant change in some area, as in the government, the military forces, the exhaustion of the soil, etc. So also art, religion, music, ethics, philosophy, and science may at one time form a well-blended configuration which will flourish for a while with a "burst of creativeness," to deteriorate when one or more links weaken. So these configurations are building up and weakening in particular areas with particular peoples, and nations rise and fall in competition with other nations.

But the whole culture of a people, the total accumulation of culture traits, will seldom diminish unless disease, droughts, very destructive wars, loss of fertility, governmental collapses, or glaciers occur.

RESISTANCES TO THE GROWTH OF CULTURE

We have spoken as if inventions are readily adopted when available. So they appear to be when time is telescoped across the perspective of history and social evolution. But in a close-up view of any one time in history, we see that the adoption of inventions is resisted by many, often bitterly. This point will be interesting to those who are engaged in social movements to improve our culture. New ideas meet with opposition. Thus the

Dyaks were accustomed to felling trees by peeling them down strip by strip, and when shown the quicker and better method of cutting in a V-shaped notch with an axe were unwilling to make the change.[21] Pasteur's discovery of germs as a cause of disease was bitterly opposed by the medical profession for a long time. Harvey's discovery, in the first part of the seventeenth century, that the blood circulates was strongly opposed, especially by the physicians and scientists of the time. Harvey claimed that no man over forty accepted the doctrine of the circulation of the blood when it was first presented.[22] "At least twenty anatomists wrote against it."[23]

The use of coal was prohibited in England in the reign of Edward I, and a citizen was tried, condemned, and executed for burning "sea cole."[24] A bill was introduced in the House of Commons at the instance of the British Admiralty forbidding the use of steam power in the British Navy.[25] That there was opposition to such useful inventions as railroads, automobiles, and the telegraph is surprising indeed, and yet such was the case.

That social inventions meet with opposition is well known. In the United States opposition to woman suffrage lasted half a century or longer. It required decades to adopt the income tax, the direct election of senators, workmen's compensation, and similar reforms. The opposition to simplified spelling is still effective, though attempts to launch it have been made by so influential a person as a president of the United States. Christianity itself was fought all the way, and Jesus, the founder, was killed by the opposition.

It is a curious phenomenon that some of the greatest blessings of the human race should have been bitterly resisted, at times with the spilling of blood, before humanity was allowed to profit by them. One wonders whether today there may not be blessings which we reject. Will the opposition to Freud prove to be as misguided as was the opposition to Pasteur? Will psychoanalysis prove of benefit to mankind as was the germ theory of disease? The question arises whether the opposition to health insurance today is comparable to the opposition to workmen's compensation a generation ago. Where we take our stand on social change is seriously significant.

There is, though, another side to this opposition to social change. We have so far spoken of the resistance to benefits proposed for us. But not every proposal is an unqualified good. Some years ago Judge Lindsey proposed companionate marriage as a solution for some of the problems of youth.[26] Would the adoption of such a form of trial marriage be a blessing or a curse? Clearly not every proposal for social change is a step in the direction of progress. Some proposals may be harmful. Others may prove to be unworkable. Was this the case with the national prohibition of the sale of liquor after the First World War? Unfortunately there is no scientific measuring stick of values, moral or otherwise, as there is for stature or distance.[27]

However, some analysis of the causes of resistance to change may help us to be more intelligent in our attitude toward specific proposals. Some of the major resistances to change will be listed and discussed.

[21] R. R. Marett, *Anthropology* (New York: Henry Holt & Co., Inc., 1912), p. 184.

[22] Robert Willis (tr.), *Introduction to the Works of Harvey* (London: Sydenham Society, 1847), p. xlvii.

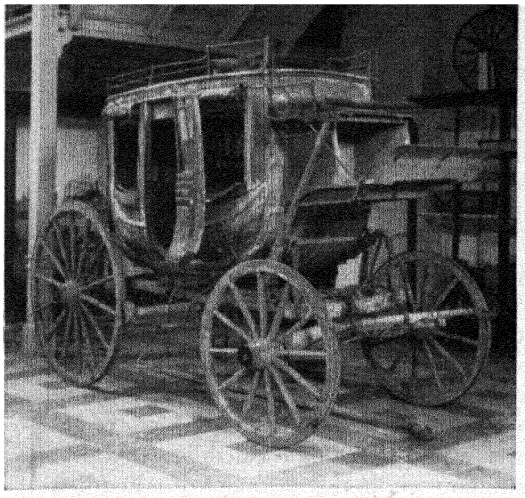
[23] Bernhard Stern, *Social Factors in Medical Progress* (New York: Columbia University Press, 1927), p. 47.

[24] Bernhard Stern, "Resistances to the Adoption of Technological Innovations," in National Resources Committee, *Technological Trends and National Policy* (Washington, D.C.: Government Printing Office, 1937).

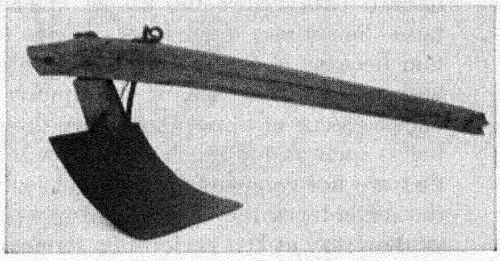
[25] *Ibid.*

[26] Ben Lindsey, *Companionate Marriage* (New York: Boni and Liveright, 1927).

[27] For fuller treatment of this point, see Chapter 26.





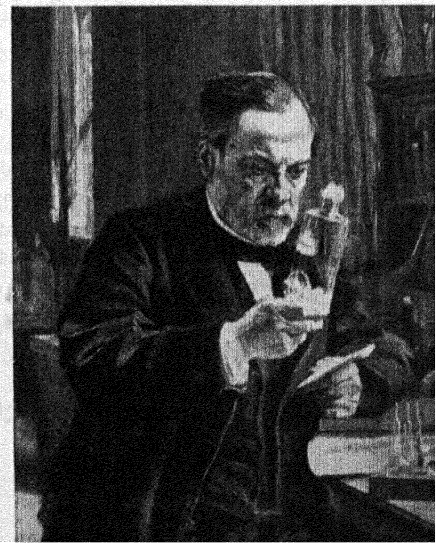


264 Useful Inventions That Have Been Opposed

A law was passed to prevent the use of coaches in Hungary in 1523. The six-shooter, which was of such value in the conquest of the Great Plains, was thought by the United States Government in the 1830's to be of no military significance. The iron plow was rejected by New Jersey farmers in 1797 on the grounds that the iron would poison the soil. In 1768 spinners broke into Hargreaves's home and destroyed his spinning jennies. When Pasteur made his discoveries about fermentation, the great Liebig refused to believe that yeast is alive and even declined to look through the microscope to see it.



The Bettmann Archive



Intolerance of early inadequacies and imperfections. Of the thousands of inventions that are recorded and never adopted, many are inadequate, for one reason or another. Some break too often and too easily when used by the average consumer. Such was the case with the early telegraphone, which recorded dictation on a spool of magnetized wire before the use of magnetized tape. Sometimes repairs are difficult to obtain because of the special skills needed, as with certain mechanical computing machines. Some new inventions have disadvantages, such as too much noise or vibration, that are not compensated for sufficiently by the advantages they possess. Again, an invention may at first perform its services very inadequately. Thus the moving pictures were at the outset very crude. In other cases the costs are prohibitive, as is true of the inventions creating artificial climate.

Social inventions may have imperfections too. The single tax, a plan proposed by Henry George to raise all revenue from taxes on land, is clearly unsuitable for governmental revenues. The Townsend plan to pay old people $200 a month, proposed when the dollar was worth much more than now, would not have been workable. During both World Wars and during the depression of the 1930's, the White House mail was clogged with proposals for social and mechanical inventions, practically all of which were worthless, to save the country in these crises. There is still a great deal of debate, and no proof, concerning how well or how badly socialism will work.

Opposition to inventions causing serious social dislocations. Some parts of culture are so closely interrelated that an invention changing one part may mean a wholesale change in the other parts. For example, the narrowness of a railroad car has been criticized, both for a club car, a sleeping car, and for certain uses as a freight car. Yet to introduce a railroad car twenty-five feet wide would necessitate widening the rails. This would have to be done for all lines, or nearly all, because of the need of transferring cars. If the lines were widened, all equipment built for the present track would have to be scrapped.

Another proposed innovation is a calendar with the same number of weeks in each month. Such a calendar was achieved, it may be noted, by the Mayan Indians before the coming of the white man. Modern industry would like such a calendar. It would mean, however, a readjustment of scheduled holidays, and many religious authorities object to changes in the dates of the holy days. A new calendar would also make the reading of history more difficult, and for a time complications and confusion might occur in changing from one calendar system to another. Hence the adoption of such an invention means a weighing of the advantages against the amount of disorganization that might result.

The difficulty of adopting a substitute form. To use old social forms is easier than to make or adopt new ones, and there is in every culture a tendency for old forms to persist. Such persistence of the old is, of course, an obstacle to change. Thus the festival at the winter solstice, called Christmas by us, was a pagan custom in northern Europe before the coming of Christianity. Christianity did not invent a new type of celebration, but rather took over an old existing form with its mistletoe, evergreens, system of gifts, feasting, masks, and songs, adding to it the birthday idea, with ritual, songs, and other accessories indicative of the Christian religion. It might not have been difficult for the Christians to invent a new festival, but it would have been more difficult to get the new ceremonial adopted than to change the old one that was already in existence. The difficulty in making a social invention may not be as great as the difficulty in getting it diffused.



265 The Best Ways of Doing Things Are Not Always Adopted

The Dyaks were accustomed to felling trees by peeling them down strip by strip, and when shown the more efficient way of cutting a V-shaped notch with an axe, they refused to make the change.

Cultural forms serve more than one function. This resistance to change on the part of a cultural form seems, upon further analysis, to rest on the fact that the form may serve more than one function. Thus Christmas serves a social purpose as well as a religious one. It is an occasion of festivity on approximately the darkest day of the year, signalizing the fact that lighter, brighter days are coming. Hence the function of festival-making causes it to persist, even if the religious function is changed or dropped. Again, the use of mistletoe was to the Druids religious as well as decorative. The decorative function causes it to persist, even after its major function of religious worship has been lost.

It is, of course, quite possible that a new invention might work better than either a cultural form already available or an adaptation of it. The new city-manager plan may give better municipal government than that which the old members of the municipal council can provide when they undertake the functions of responsibility for detailed administration. The continuance of an old system in the face of changing needs is a type of resistance to social change. The situation is more serious when a new invention can do the task better than an old cultural form.

Economic costs. In modern times, to launch a mechanical invention or a social one costs money. To bring about the adoption of national compulsory health insurance will cost large sums of money. A company may spend $1,000,000 to advertise a toothpaste before putting it on the market. Hence the mere cost of promoting inventions and social reforms is an obstacle to their adoption.

Habits. It is a truism of psychology that habits persist unless new drives break them. So old habits present obstacles to the adoption of innovations. Particularly is this true of old people whose drives are usually receding and who are generally conservative.

Conservativism of old people. The children of immigrants learn the ways of the new country better and quicker than do the old people. The children do not have such

deeply entrenched habits that interfere with the acquisition of new ones. Habit comes from repetition of an act; repetition makes the doing of an act easier. This ease results from the fact that energy flows more readily along nerve paths when the connections have already been made in a coordinated system, than when a new path must be established. Like a path in the woods, a nerve path is more easily followed when it has been frequently traversed.

The views of the old people often represent opinions formed many years ago, opinions which have not changed with the changing times. Fifty-one per cent of women over 45 years of age think the moral standards of youth are lower than they used to be, while only 32 per cent of those under 30 years of age think so.[28] Similarly, 31 per cent of the older people are opposed to birth control, as compared with 12 per cent of the young.[29] As regards the question, "do you believe in divorce?" 40 per cent of the old voted "no" and only 25 per cent of the young.[30] It may be that the old are nearer right than the young, but with that question we are not concerned. The point is that the opinions of the old are nearer to the general opinions of a generation or so ago, and not as much like those of the present as are the attitudes of the young. For 69 per cent of all voters in 1938 believed in permitting divorce, 79 per cent were in favor of birth control, and 58 per cent did not believe that the moral standards today were lower. The greater conservatism of older people is also shown by the fact that they stay with a particular political party, such as the Democratic or Republican, more consistently than do the young. Younger voters change party lines more readily.[31]

Fear of the new. Uncertainty about the new and how it will work out is found in cultures earlier than those of the Western world of the twentieth century. Modern attitudes are more hospitable to the new. There are still many who have the fear of airplane travel, hardly justified by the statistics of accidents. In earlier cultures, the attitude of religious Islam is definitely hostile toward the new in science. This attitude is shown in the following letter written by a Moslem in response to a request for information about his community:

My Illustrious Friend and Joy of My Liver:

The thing which you ask of me is both difficult and useless. Although I have passed all my days in this place, I have neither counted the houses nor inquired into the number of inhabitants; and as to what one person loads on his mules and the other stows away in the bottom of his ship, that is no business of mine. But above all, as to the previous history of this city, God only knows the amount of dirt and confusion that the infidels may have eaten before the coming of the sword of Islam. It were unprofitable for us to inquire into it. . . .

Listen, O, my son! There is no wisdom equal to the belief in God. He created the world and shall we liken ourselves unto him in seeking to penetrate into the mysteries of his creation? Shall we say, Behold this star shineth around that star, and this other star with a tail goeth and cometh in so many years? Let it go, He from whose hand it came will guide and direct it. Thou art learned in the things I care not for, and as for what thou hast seen, I spit upon it. Will much knowledge create thee a double belly, or wilt thou seek paradise with thine eyes?

The meek in spirit,

Imaum Ali Zado [32]

It is clear that such an attitude toward science will be an obstacle to its development.

Reverence for the past. Another attitude unfavorable to change is reverence for certain conditions of the past. In general we tend to remember more of the things that are

[28] *Ladies Home Journal*, May 1938, p. 14.
[29] *Ibid.*, March 1938, p. 14.
[30] *Ibid.*, February 1938, p. 14.
[31] From unpublished data in the possession of the authors.
[32] W. I. Thomas, *Source Book for Social Origins* (Boston: Richard G. Badger, 1902), p. 170.

pleasant to contemplate than of the things that are unpleasant to recall. We forget bills more readily than we forget checks. Names associated with unpleasant experiences are forgotten more readily than names associated with pleasant conditions.[33] Selection favors the past. The home and fireside are usually very pleasant to remember, and this remembrance operates to conserve the family. The alumni of a college are by common consent conservative and want their alma mater to remain more or less as it was in the time when they were students.

Sentiment is definitely built up around institutions to which loyalty is felt. Such is the case with government.[34] The Constitution of the United States is revered, as are the views of national heroes. Hence there is a definite resistance to change in governmental patterns. In time of crisis such as wars, depressions, or revolutions, the forms are changed quite rapidly, but otherwise the resistance to change is impressive.

Vested interests. There is still another type of attitude that has proved very effective in resisting change. It is the attitude of self-interest on the part of those who derive differential advantage from the *status quo*. For instance, the construction of railroads was opposed by the owners of canals who derived an advantage from the existing situation and feared they would lose by the competition of the railroads. Favored groups who probably stand to lose by change have been called "vested interests" by Thorstein Veblen.[35] Their opposition to change rests in their selfishness. For instance, the free delivery of mail to farmers was for some time opposed successfully by the owners of saloons, who liked the idea of the farmer coming to town for his mail. He might stop for a drink at the corner saloon or the one on the outskirts of town, usually called "the last chance." Studies made of opposition to change reveal one of the most frequent and powerful obstacles to be that of the "vested interests."[36] This is also the common conclusion of reformers.

It is to be noted that the vested interests are not all motivated by a desire for financial gain. The quest for power or prestige are also motives. Changes in the curricula of colleges are generally not favored by those teaching established subjects. It is to be noted, too, that self-interest seeks change when it is favorable as truly as it opposes change when it is unfavorable. The lobbies maintained around legislative halls to favor or oppose legislation show this to be the case.[37]

The number of vested interests in society is often quite large. In addition, they possess considerable power because of their position, so that they are a formidable opposition to change. In a democracy with the device of voting, there is provision for the orderly registration of opinion on the party in power or on particular proposals. But often no such provision for voting exists; or even when it does, the vested interests have a differential advantage in the use of propaganda, because of their preferred position. In opposing a measure, the vested interests seldom give the true reason for their action, which is that they would lose money, power, or prestige. Their motives are disguised. For instance, the following selection from a flowery southern orator seems to rationalize the use of child labor in the cotton mills:

> Here will be found a never failing asylum for the friendless orphans and the bereft widows,

[33] Sigmund Freud, *The Psychopathology of Everyday Life* (New York: The Macmillan Company, 1914).

[34] Bernhard Stern, *Social Factors in Medical Progress*, Chapter 11.

[35] Thorstein Veblen, *Vested Interests and the State of the Industrial Arts* (New York: B. W. Huebsch, 1919).

[36] See the two works by Bernhard Stern cited above.

[37] Kenneth G. Crawford, *The Pressure Boys* (New York: Julian Messner, Inc., 1939).

the distribution of labor and the improvements in machinery happily combining to call into profitable employment the tender services of those who have just sprung from the cradle as well as those who are tottering to the grave, thus training up the little innocents to early and wholesome habits of honest industry and smoothing the wrinkled frown of decrepitude with the smiles of competency and protection.[38]

In modern times when social movements are organized to effect a change, as for instance the abolition of child labor, a great deal of organized effort is needed. Those engaged in the process of reform are impressed with the will power, effort, and determination required. This necessity is due to the fact that the vested interests become organized, too, and offer effective resistance. The opposition of vested interests becomes a matter of great concern and appears in the drama of social conflict to be the arch enemy of the changes proposed.

Rates of Change in Modern Civilization

The preceding survey of the processes of cultural evolution leads to a consideration of social change in modern times. What will be the probable rapidity of change in the future? Many people refer to our times as an age of change, with the possible implication that prior to the present there was a stationary culture, and that in the future there will probably be a stabilization of the forces of change. In other words, some observers seem to think that the present is an age of transition between two periods of peace and quiet. Of this theory it may be said there is little evidence to support the idea that culture actually was stationary in the epoch immediately preceding the present. The past would seem to be characterized by slower changes; in modern times the changes have been faster.

[38] Quoted by Ellen Wetherell, "Among the Cotton Mills," *International Socialist Review*, 14: 416, 1913–14.

Material invention a cause of rapid change. In seeking to determine whether changes will continue in the future, it is well to begin by a study of the causes of change. Primarily, the cause is the making of inventions, mechanical and otherwise; and secondarily, the diffusion of inventions already made. In none of the modern countries does the present process of mechanical invention give any indication of stopping. In the United States the number of patents granted by decades is shown in Table 42.

Not all inventions are patented. Many patents are quite minor, and some are silly as, for instance, an upholstered sofa to be placed on the front of street cars for the comfort of jay walkers who are hit by the street car. So there could be variations in patents without affecting very much the size of the stream of important inventions.[39] The probability is that we shall have a continuation of many thousands of patents for years to come. Even if a moratorium on invention were declared, as has been suggested (somewhat fantastically) many times, the new inventions already in existence would continue to produce social changes for centuries.

For the non-material culture, there is no

[39] S. C. Gilfillan, *The Sociology of Invention* (Chicago: Follett Publishing Company, 1935).

Table 42 · Number of Patents Issued, 1860–1955*

Period	Average Number of Patents per Year
1950–55	40,000
1940–49	31,000
1930–39	44,000
1920–29	42,000
1910–19	38,000
1900–09	31,000
1890–99	22,000
1880–89	20,000
1870–79	13,000
1860–69	7,000

*Data from: U. S. Bureau of the Census, *Historical Statistics of the United States, 1789–1945*, pp. 312–313; and *Annual Report* of the U. S. Commissioner of Patents.

index of change as good as patents are for the material culture. It is therefore difficult to predict about social inventions. However, it should be noted that many social inventions are precipitated in the non-material culture by inventions in the material culture. Dangerous machinery is a cause of the social invention of workmen's compensation insurance. A continuance of mechanical invention, therefore, will in itself produce further changes in the realm of the non-material culture. In addition, social inventions will be produced which are not immediately and directly dependent on technology, and which in turn will have social effects and lead to other social inventions. Thus the invention of the corporation leads to the invention of the corporation tax.

There are a number of lesser situations affecting the rate of inventions. Much scientific discovery and inventing requires scientific training and occurs in specialized laboratories. Perhaps a smaller proportion of inventions is now made by the lone inventor or by the mechanic in the course of his work than in earlier times. It is said that of all inventions and improvements made a smaller percentage is patented now than formerly. But of this we are not certain. Corporations are setting aside larger research funds. Advertising of new products and shortening rates of obsolescence encourage inventing. Policies of government toward research are also influential. Social inventions are encouraged as we become more accustomed to rapid change and as resistances to change weaken. Executives of social, economic, and political institutions can do much to speed innovation.

Even if all invention ended this year, the social effects of many inventions of the last one hundred years would continue far into the future. The telephone was invented in 1886; yet its social effects continue at the present time.

Probability of continued rapid change. It is interesting to speculate on whether or not mankind's appetite for inventions may be satiated. There are some who think that men have about all they want in material goods, and that there is no further need for invention. No doubt some men in ancient Egypt would have felt the same way, yet many new inventions have been made since the Ptolemies. Indeed, the variety of man's detailed wants seems limitless. It would certainly be unwise to draw the conclusion that mankind has all the material goods it wants and that for this reason there will be no more invention. Rather, the foregoing analysis indicates that in the near future, as in the present, we shall continue to have very rapid changes. In fact, one author has compiled a list of 1500 needed inventions.[40] These represent a very wide demand that still exists.

If George Washington could visit the White House at the present time, so many words, like automobile, broadcasting, video, United Nations, etc., would be missing from his vocabulary that a conversation between the first president and the latest one could be carried on only with difficulty. When one of the authors of this book was in college as the reader is today, there were only a few telephones, no motion pictures, no radios. President Theodore Roosevelt was praised in an editorial for his courage in riding in an automobile. No one dreamed that a pair of silk-like stockings could be made from a wooden box. Perhaps in 50 years the reader will have seen as many other marvelous changes. We have only recently split the nucleus of the atom and transmuted one element into another — the dream of the ancient alchemist. Television will have profound effects upon society. The personal helicopter will be common. The electric eye and the fractionated motor can make almost every job automatic. Talking books may become the texts for future students.

[40] Raymond F. Yates, *Fifteen Hundred Needed Inventions* (New York: Donley Publishing Company, 1933).

SUMMARY

The evolution of culture until sometime in the ice ages depended upon the biological evolution of men. From the middle of the last ice age, the evolution of culture depended upon four factors — invention, exponential accumulation, diffusion, and adjustment — much as biological evolution depends upon mutation, natural selection, and heredity.

The accumulation factor is especially important. We invent more now than did Cro-Magnon man of the last ice age because we have more accumulated knowledge and a greater stockpile of tools with which to invent, and probably not because we have any more inherited mental ability.

The rate of invention is affected by factors other than the accumulated pile of knowledge and tools. Demand and mental ability are also factors. Demand or social evaluation gives direction to the inventive effort which is, for instance, sometimes directed toward the material culture, sometimes toward the arts, or sometimes toward religion. Inherited mental ability, as measured by a proportion of the area of a frequency curve, is probably roughly constant over the years and hence not an important factor in explaining the growth of culture. At any one time there is, of course, quite a variation in the inherited mental capacity of individuals.

The exponential growth of culture is an ideal statement, which in actual life has many qualifications. Particularly, the growth is likely to slow up from time to time, yielding some irregularities.

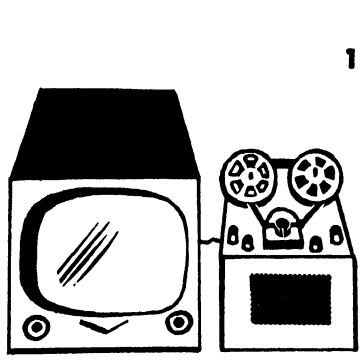
Culture actually grows in particular areas. In modern times, these are generally called civilizations, such as the Indian or the Chinese civilization. Inventions come more often from outside than from inside a particular area. Since much of the growth of culture in a particular area is by diffusion, growth may be irregular. Also new inventions in one part of a culture or civilization cause adjustment, and hence new inventions in other parts of the culture. Thus a discovery in science may cause an inventional adjustment in religion.

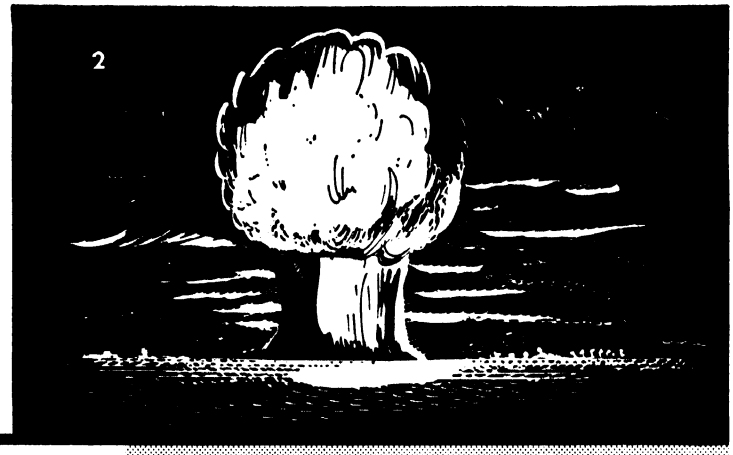
Creativeness, which is highly valued in a civilization and which means a rapid growth of invention, is often dependent upon a few basic inventions which lend themselves to frequent use in making other inventions. Such for instance were the steam engine and the discovery of evolution. The diffusion of big inventions and big ideas throughout a civilization is likely to mean a burst of creativeness.

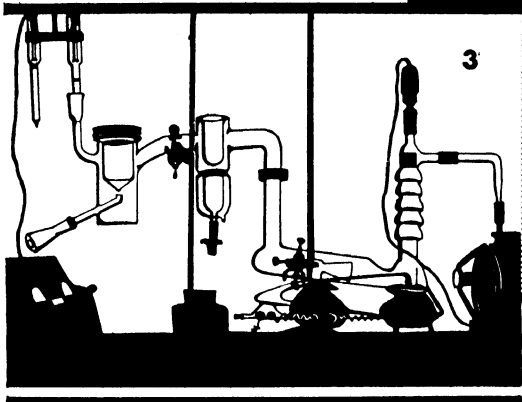
Culture is a configuration of interconnected parts. Sometimes large sections of this pattern are highly integrated into a unified whole. Thus government, military forces, economic production, and cultural activities may be nicely integrated. In other cultures art, religion, and science may be welded together.

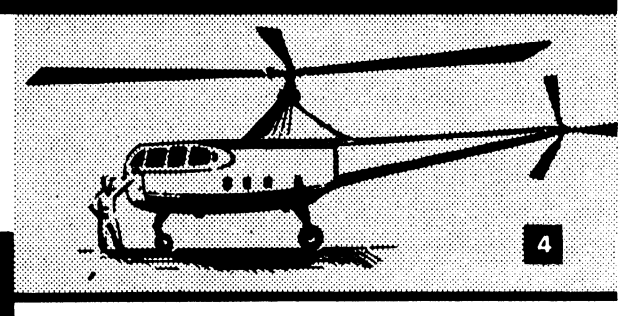
The occurrence of these patterns depends upon a variety of details and upon the stages of evolution of each. These patterns break up, weaken, or change as various elements change, such as fertility of soil, or military position. Civilizations — that is, these selected configurations — rise and fall. In contrast, the accumulated cultural base of an area as a whole seldom decreases. The appraisal of civilizations depends not only on the unity of the pattern, but upon the values of the appraiser. Thus Brooks Adams values law, order, and government; and Oswald Spengler values creativeness in the arts, philosophy, and science.

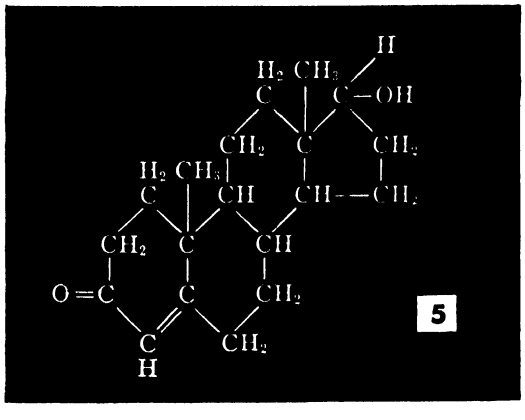
The adoption of inventions is often resisted for a time, particularly by the vested interests that are likely to lose their preferred position by the use of the invention. Vested interest groups also will urge the adoption of an invention if their position is thereby strengthened. The resistances to invention are many and varied, and account for the inertia of culture.

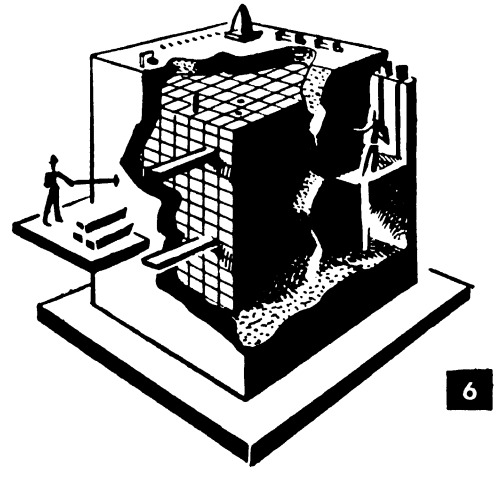












266 Inventions of Significance for the Future

(1) Recording of vision on magnetized tape attached to television receiver. (2) Atomic bomb. (3) Photosynthesis. (4) Helicopter. (5) Synthetic production of hormones, vitamins, and amino acids. (6) Atomic reactor. At the beginning of this century the telephone, the motion picture, the radio, the airplane, the automobile, and rayon were in the infant stage of development and have since become great influences in modern civilization. Perhaps during the next half century the inventions pictured above may become just as significant.

As to the future, the prospects are for continued rapid changes both in the material and non-material culture, unless a considerable disorganization should occur, for the accumulation of knowledge continues.

QUESTIONS FOR DISCUSSION

1. How does culture grow? How does a particular culture grow?
2. What does the inventor owe to inventors who preceded him? Cite some illustrations.
3. Why is the process of accumulation at present more evident in respect to material than non-material culture? Was it ever otherwise?
4. How much of the culture of America is 100 per cent American?
5. Can cultures be rated as higher or lower?
6. What makes a culture particularly creative?
7. Why are the southern mountaineers "backward"?
8. Why are old people in general more resistant to social change than young people?
9. What are several particularly significant inventions of the past? What made them great?
10. What factors prevent the growth of culture from following strictly the exponential principle?
11. Is the growth of culture cyclical?
12. Will another World War obliterate man's social heritage?
13. Who are the vested interests in your community? On your campus? What changes do they oppose? What changes are they seeking to promote?
14. Would it be possible to declare a moratorium on inventions? If possible, would it be desirable to do so?

TOPICS FOR REPORTS

1. The natural history of the labor union.
2. The principle of cross-fertilization as manifested in the development of the field of social psychology.
3. A comparative study of the theories of culture of Toynbee, Spengler, and Sorokin.
4. Effects of physical isolation on the culture of the southern highlanders.
5. Lost culture traits.
6. A comparative study of the culture of ancient and modern Rome.
7. Factors responsible for the loss of cultural leadership by Spain.
8. Effect of secrecy on atomic developments.
9. The growth of Japanese culture under the impact of western technology.

SELECTED READINGS

ADAMS, BROOKS, *The Law of Civilization and Decay.* New York: Alfred A. Knopf, Inc., 1943.

Remarkable in that it forecast in 1896, when the book was written, the rise of the U.S. and U.S.S.R. as superpowers, and also the decline in rank of European countries and the British Empire, a prediction based upon the economic and technological factors.

CHAPIN, F. STUART, *Cultural Change.* New York: Century Company, 1928.

This book is characterized by some ingenuity in tracing the processes of growth of the non-material culture and the development of social inventions.

DIXON, ROLAND B., *The Building of Cultures.* New York: Charles Scribner's Sons, 1928.

Especially good on the subjects of invention, diffusion, and their interrelations.

HART, HORNELL, *The Technique of Social Progress.* New York: Henry Holt & Company, Inc., 1931.

This book has some very ingenious analyses of records of social change, which by implication throw considerable light on resistances to change.

KROEBER, A. L., *Configurations of Culture Growth.* Berkeley, Calif.: University of California Press, 1944.

A careful, well-documented description of the pattern of interrelations of philosophy, science, sculpture, painting, literature, and music in the great civilizations, with a concluding chapter on the growth of nations.

LINTON, RALPH, *The Tree of Culture.* New York: Alfred A. Knopf, Inc., 1955.

A work of great erudition affording many insights into the processes of the growth of culture.

LOWIE, ROBERT H., *Are We Civilized?* New York: Harcourt, Brace & Co., Inc., 1929.

This book debunks the modern point of view on civilizational values and presents an excellent picture of early cultures with considerable sympathy from the point of view of primitives. A useful and readable account.

OGBURN, WILLIAM F., *Social Change.* New York: The Viking Press, 1922.

This book contains a chapter on resistances to inventions and a special one on the nature of cultural lag.

SPENGLER, OSWALD, *The Decline of the West.* New York: Alfred A. Knopf, Inc., 1939.

A vague, emotional, erudite speculation on the rise and fall of the spiritual creativeness of great civilizations. A translation of volumes published in German in 1918 and 1922.

STERN, BERNHARD J., "Resistances to the Adoption of Technological Innovations," *Technological Trends and National Policy,* National Resources Committee. Washington: Government Printing Office, 1937.

A running account of the resistances which have developed to the adoption of successful mechanical inventions, such as the railroads, the coach, and so on. A readable and almost unbelievable account of resistances to inventions that have proved of great benefit to society.

TOYNBEE, ARNOLD J., *A Study of History.* An Abridgement of Volumes I–VI by D. C. Somervell. New York: Oxford University Press, Inc., 1947.

A study of twenty-one civilizations with special emphasis on religious ties and moral qualities shown in response to the challenge of environment.

WALLIS, WILSON D., and MALCOLM M. WILLEY, *Readings in Sociology.* New York: F. S. Crofts and Company, 1930.

This book contains some very readable accounts of the nature of social change, especially in modern times. An exceptionally useful book for undergraduate students in sociology.

24

The Social Effects of Innovation

Professor Simon Patten years ago told his class that the invention of the bathtub had destroyed the perfumery business. If so, it has in recent years had a revival, as indicated by the advertisements of perfumes in women's fashion magazines. Perhaps there has been a change in the reasons for using perfume, as suggested by this advertisement: EVE HAD ONLY AN APPLE. YOU HAVE INTOXICATION PERFUME.

Similarly it has been said that the invention of the icebox weakened the trade in spices, formerly used to conceal the taste of bad meat. If the electric refrigerator had been in use in 1492, Columbus might not have set sail for the land of spices and hence might not have discovered America.

Such colorful comments are for dramatic effect; but there is no doubt that the motion picture business has been hurt by the invention of television, and that the exportation of nitrates from Chile to the United States was curtailed when fixation of nitrogen from the air was developed.

Invention not only has economic effects; it influences social organization. Suburbia with its way of life was spread by the internal combustion engine. The tractor caused farm labor to migrate to towns. The motion picture has influenced manners and morals. The electric light brought baseball at night. Crime was affected by the automobile. Television has reduced reading and conversation. No one knows what the atomic bomb will do to us.

There are many new inventions every year, even every week. They are so important that ours is called the machine age. The impact of mechanical invention and discoveries in applied science is so great that we devote this chapter to its study. Also we shall show that social inventions cause social changes in the same way as do mechanical inventions.

How an invention produces social changes. The thoughtful reader may ask: how can an inanimate object produce social changes? Are not all social changes produced by people? Yet we say, for instance, that the invention of the armored tank abolished the use of cavalry. We do not mean, of course, that the tank, immobile without the direction of soldiers, by itself abolished the use of cavalry. It was the fact that soldiers chose to use the tank that abolished cavalry.

Yet it is justifiable to say the tank did it, because of this truth: a change cannot be produced by something that does not change, that is, by a constant. The existence of soldiers who want quick transportation in battle is a constant, for they have always existed since the beginning of war. While such soldiers are a necessary factor in the use of tanks, they are not the cause of the replacement of cavalry by tanks. The change that produced this change was the invention of armored tanks. (So also, we do not say that the cause of your attending college is the presence of oxygen in the air. The reason is

that you want more education rather than staying at home, or taking a job, or getting married. Oxygen in the air is a necessary factor in your attending college, but not a cause. For the cause of a change must be a change.)

Again, when it is said that tanks abolished the use of cavalry, the place or extent is not specified. In outlying mountainous regions, cavalry is still used.

Nor is it to be implied that there can be only one cause of the replacement of cavalry. If the tank had never been invented, some other influence, as, for instance, the airplane, could have caused the abandonment of cavalry.

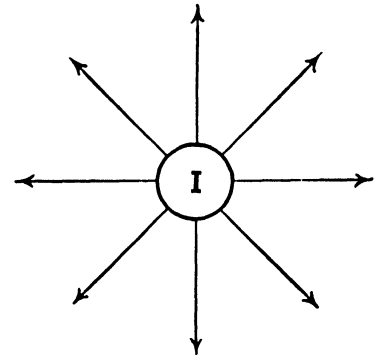
It should also be noted that it is not the existence of just one tank but of many tanks that causes a social change. A long time may elapse after an invention is made before it is widely used.

Finally, not all changes are so radical that the change is from existence (as of cavalry) to nonexistence. Thus the invention of stoplights at street crossings did not abolish all automobile accidents, but only decreased the number. Many changes are changes in degree.

Having shown in this section how inventions cause social changes, we next consider the different forms which this inventional influence takes. There are dispersion, succession, and convergence.

DISPERSION, OR THE MULTIPLE EFFECTS OF A SINGLE MECHANICAL INVENTION

An important invention need not be limited to only a single social effect. Sometimes it exerts many influences which spread out in different directions like the spokes of a wheel. Thus the radio influences entertainment, education, politics, transportation, and many other types of activity. The following list, worked up in 1932, of social effects of



267 Dispersion: The Many Influences of a Great Invention

The influences of an important invention, as, for instance, the radio, often flow out in various directions and affect many different institutions and customs.

the radio gives a picture of the many different ways in which a single invention may influence society:

I. On Uniformity and Diffusion

1. Homogeneity of peoples increased because of like stimuli.
2. Regional differences in culture become less pronounced.
3. The penetration of the musical and artistic city culture into villages and country.
4. Ethical standards of the city made more familiar to the country.
5. Distinctions between social classes and economic groups lessened.
6. Isolated regions are brought in contact with world events.
7. Illiterates find a new world opened to them.
8. Restrictions of variation through censorship resulting in less experiment and more uniformity.
9. Favoring the widely spread languages.
10. Standardization of diction and discouragement of dialects.
11. Aids in correct pronunciation, especially foreign words.
12. Cultural diffusion among nations, as of United States into Canada and vice versa.

II. On Recreation and Entertainment

13. Another agency for recreation and entertainment.
14. The enjoyment of music popularized greatly.
15. Much more frequent opportunity for good music in rural areas.
16. The manufacture of better phonograph music records encouraged.
17. The contralto favored over sopranos through better transmission.
18. Radio amplification lessens need for loud concert voices.
19. Establishment of the melodramatic playlet with few characters and contrasted voices.
20. Revival of old songs, at least for a time.
21. Greater appreciation of the international nature of music.
22. Entertainment of invalids, blind, partly deaf, frontiersmen, etc.
23. With growth of the reformative idea, more prison installations.
24. Interest in sports increased, it is generally admitted.
25. Slight stimulation to dancing at small gatherings.
26. Entertainment on trains, ships, and automobile.

III. On Transportation

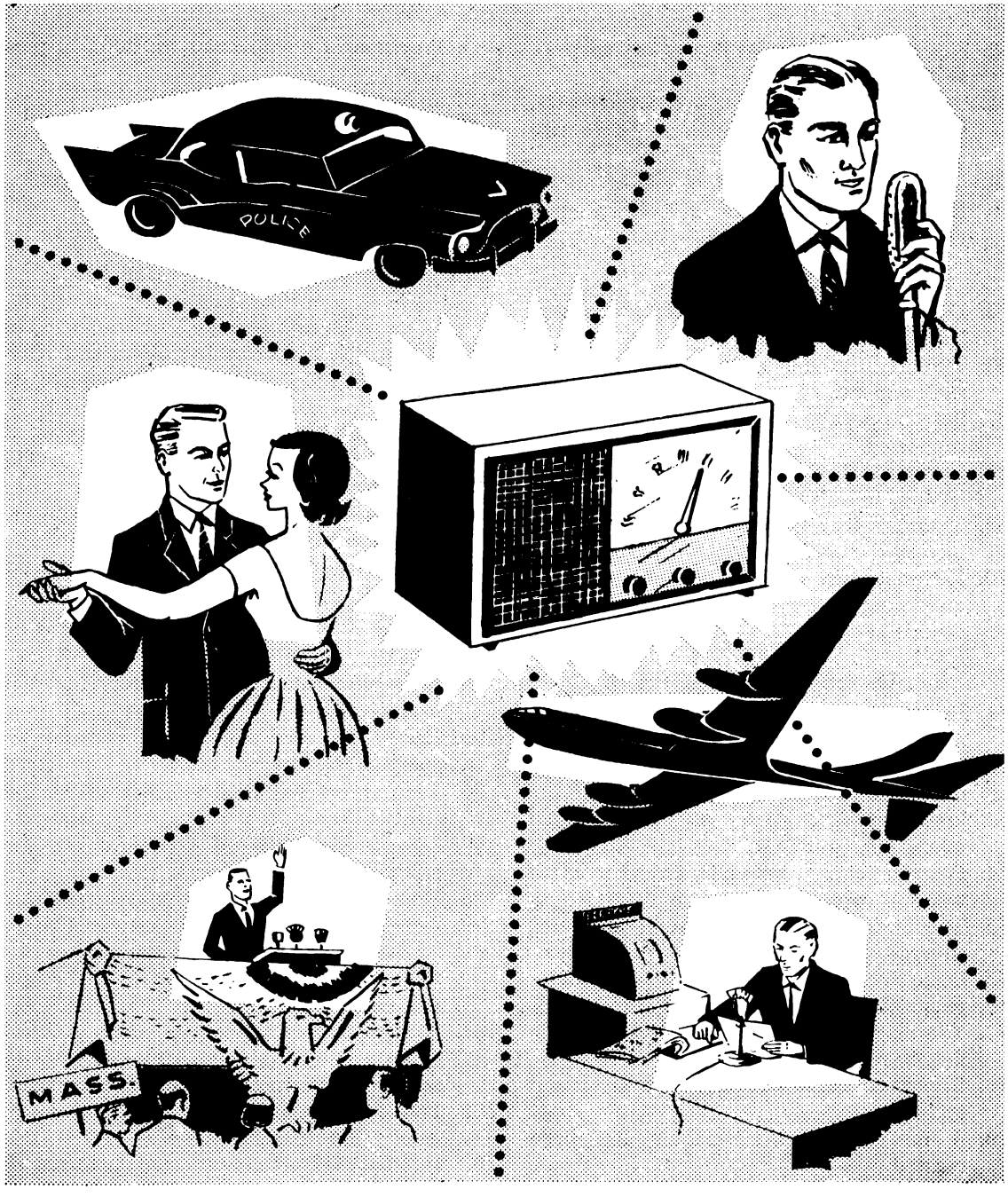
27. Radio beams, enabling aviators to remain on course.
28. Directional receivers guide to port with speed and safety.
29. Aid furnished to ships in distress at sea.
30. Greater safety to airplanes in landing. Radio system also devised now for blind landing.
31. Chronometers are checked by time signals.
32. Broadcasts of special weather reports aid the aviator.
33. Brokerage offices on ships made possible.
34. Receipt of communications en route by air passengers.
35. Communication between airplanes and ships.
36. Ships directed for better handling of cargoes.

IV. On Education

37. Colleges broadcast classroom lectures.
38. Broadcasting has aided adult education.
39. Used effectively in giving language instruction.
40. Purchasing of textbooks increased slightly, it is reported.
41. Grammar school instruction aided by broadcasting.
42. Health movement encouraged through broadcast of health talks.
43. Current events discussions broadcast.
44. International relations another important topic discussed, with some social effects, no doubt.
45. Broadcasting has been used to further some reform movements.
46. The government broadcasts frequently on work of departments.
47. Many talks to mothers on domestic science, child care, etc.
48. Discussion of books aids selection and stimulates readers.
49. The relationship of university and community made closer.
50. Provision of discussion topics for women's clubs.
51. Lessens gap schooling may make between parents and children.
52. New pedagogical methods, i.e., as to lectures and personality.
53. Greater knowledge of electricity spread.
54. The creation of a class of radio amateurs.

V. On the Dissemination of Information

55. Wider education of farmers on agricultural methods.
56. Prevention of loss in crops by broadcasting weather reports.
57. Education of farmers on the treatment of parasites.
58. Market reports of produce permitting better sales.
59. Important telephone messages between continents.
60. Small newspapers, an experiment yet, by facsimile transmission.
61. News to newspapers by radio broadcasting.



268 Dispersion: Some Social Effects of the Radio

A big invention is the center of many different effects that radiate in different directions like the spokes of a wheel. For instance, the radio has influenced the detection of crime, affected the dancing and recreation of young people, produced new occupations, changed the manner of political campaigning, increased the safety of airplanes, and reduced the time for spreading the news.

62. News dissemination in lieu of newspapers, as in british strike.
63. Transmission of photographic likenesses, letters, etc., especially overseas where wire is not yet applicable.
64. Quicker detection of crime and criminals, through police automobile patrols equipped with radio.

VI. On Religion

65. Discouragement, it is said, of preachers of lesser abilities.
66. The urban type of sermon disseminated to rural regions.
67. Services possible where minister cannot be supported.
68. Invalids and others unable to attend church enabled to hear religious service.
69. Churches that broadcast are said to have increased attendance.
70. Letter writing to radio religious speakers gives new opportunities for confession and confidence.

VII. On Industry and Business

71. In industry, radio sales led to decline in phonograph business.
72. Better phonograph recording and reproducing now used.
73. Lowering of cable rates followed radio telegraph movement.
74. Point-to-point communication in areas without wires.
75. The business of the lyceum bureau, etc., suffered greatly.
76. Some artists who broadcast demanded for personal appearance in concerts.
77. The market for the piano declined. Radio may be a factor.
78. Equipment cost of hotel and restaurant increased.
79. A new form of advertising has been created.
80. New problems of advertising ethics, as to comments on competing products.
81. An important factor in creating a market for new commodities.
82. Newspaper advertising affected.
83. Led to creation of new magazines.
84. Consumption of electricity increased.
85. Provision of employment for 200,000 persons.
86. Some decreased employment in phonograph and other industries.
87. Aid to power and traction companies in discovering leaks, through the assistance of radio listeners.
88. Business of contributing industries increased.

VIII. On Occupations

89. Music sales and possibly song-writing have declined. Studies indicate that broadcasting is a factor.
90. A new provision for dancing instruction.
91. A new employment for singers, vaudeville artists, etc.
92. New occupations: announcer, engineer, advertising salesmen.
93. Dance orchestras perhaps not increased but given prominence.

IX. On Government and Politics

94. In government, a new regulatory function necessitated.
95. Censorship problem raised because of charges of swearing, etc.
96. Legal questions raised beginning with the right to the air.
97. New specialization in law; four air law journals existing.
98. New problems of copyright have arisen.
99. New associations created, some active in lobbying.
100. Executive pressure on legislatures, through radio appeals.
101. A democratizing agency, since political programs and speeches are designed to reach wide varieties of persons at one time.
102. Public sentiment aroused in cases of emergencies like drought.
103. International affairs affected because of multiplication of national contacts.
104. Rumors and propaganda on nationalism have been spread.
105. Limits in broadcasting bands foster international arrangements.
106. Communication facilitated among belligerents in warfare.

107. Procedures of the nominating conventions altered somewhat.
108. Constituencies are kept in touch with nomination conventions.
109. Political campaigners reach larger audiences.
110. The importance of the political mass meeting diminished.
111. Presidential "barnstorming" and front porch campaign changed.
112. Nature of campaign costs affected.
113. Campaign speeches tend to be more logical and cogent.
114. Appeal to prejudice of local groups lessened.
115. An aid in raising campaign funds.
116. Campaign speaking by a number of party leaders lessened.
117. Campaign promises over radio said to be more binding.
118. High government officers who broadcast are said to appear to public less distant and more familiar.

X. On Other Inventions

119. Development stimulated in other fields, as in military aviation.
120. The vacuum tube, a radio invention, is used in many fields, as for lowering elevators, automobile train controls, converting electric currents, applying the photoelectric cell, as hereinafter noted. A new science is being developed by the vacuum tube.
121. Television was stimulated by the radio.
122. Developments in use of phonograph stimulated by the radio.
123. The teletype is reported to have been adapted to radio.
124. Amplifiers for radio and talking pictures improved.
125. Geophysical prospecting aided by the radio.
126. Sterilization of milk by short waves, milk keeping fresh for a week.
127. Extermination of insects by short waves, on small scale, reported.
128. Body temperature raised to destroy local or general infections.
129. The condenser with radio tubes used variously in industry, for controlling thickness of sheet materials, warning of dangerous gas, etc.
130. Watches and clocks set automatically by radio.

XI. Miscellaneous

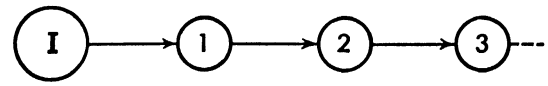
131. Morning exercises encouraged a bit.
132. The noise problem of loud speakers has caused some regulation.
133. A new type of public appearance for amateurs.
134. Some women's clubs are said to find the radio a competitor.
135. Late hours have been ruled against in dormitories and homes.
136. Humor as a mode of expression perhaps hampered in broadcasting.
137. Growth of suburbs perhaps encouraged a little bit.
138. Letter writing to celebrities a widespread practice.
139. Irritation against possible excesses of advertising.
140. Development of fads of numerology and astrology encouraged.
141. Automobiles with sets have been prohibited for safety, in some places.
142. Additions to language, as "A baby broadcasting all night."
143. Aids in locating persons wanted.
144. Used in submarine detection.
145. Wider celebration of anniversaries aids nationalism.
146. Weather broadcasts used in planning family recreation.
147. Fuller enjoyment of gala events.
148. Home duties and isolation more pleasant.
149. Widens gap between famous and near famous.
150. Creative outlet for youth in building sets.[1]

[1] President's Research Committee on Recent Social Trends, *Recent Social Trends*, pp. 153–156. By permission of McGraw-Hill Book Co. Copyright, 1933. It should also be noted that: "In some cases the effects may not be easily apparent, because obscured by other more powerful forces operating in the opposite direction. As an illustration, the radio, through the broadcasting of educational matters and current events to adults at home, is said

SUCCESSION, OR THE DERIVATIVE SOCIAL EFFECTS OF A SINGLE MECHANICAL INVENTION

When an invention has an influence on some institution or custom, the influence does not stop there but continues on and on, each influence succeeding the preceding one like links in a chain. The influence of the cotton gin was first to increase the planting of cotton, since it could be processed more quickly and with less labor. Seeding the cotton, a very tedious hand operation, was the neck of the bottle, so to speak. The production of cotton could not be increased without more labor, so additional Negroes were brought from Africa and slavery grew very rapidly. The increase in slavery was a derivative influence of the cotton gin, a second link in the chain. The increase in slaves and in the power of the agricultural South, when cotton was king, led to the War Between the States, the third derivative influence of the cotton gin. The influence of the Civil War has extended even into the twentieth century.

This illustration needs examination. It should be noted that the cotton gin was not the sole determining cause of the increase of cotton production. England was clothing a large part of the world from her textile mills; hence developing commerce was a factor in the increase in cotton. But the gin made the supply of cotton more readily available. In other words, the variation in technology, through the addition of the gin, influenced the increase in cotton but was not necessarily the sole cause of its increase.



269 **The Successive Derivative Influences of an Invention**

The airplane (I) affects the method of warfare (1), which in turn increases the differential between the small and big powers (2), which in turn changes the system of power politics, (3). The invention of the atom bomb will have a first social effect of influencing the method of warfare, particularly the bombing of large cities, which in turn is expected to bring about, as a derivative influence, the moving of large factories some distance from the city center, and also the deconcentration of the urban population.

Also, more cotton could have been grown with white labor, if there had been no Negroes. Furthermore, the expanding South called for more slaves even in regions where there was little cotton grown. So slavery might have increased even if there had been no cotton. But again the increased ease with which cotton could be seeded by the use of the gin influenced the supplying of more slaves to the cotton growers. This is true, even though the influence of the cotton gin is relatively less by the time this second derivative effect is reached.

The War Between the States was caused by many factors, of which the freeing of the slaves was but one. Yet the struggle over slavery, and particularly the conflict of two economic systems, was there. One of these systems was an economy where cotton was king by virtue of foreign trade. Since exports equal imports in value, the exporting South did not want the North to restrict imports by a tariff wall, which the North favored to protect their infant industries. The Cotton Kingdom rested on slave labor and the conflict of these two systems did lead to a war. The influence of the cotton gin becomes attenuated by the time the Civil War

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to lessen the differences that often appear between parents and their children because of the fact that their respective educations have differed greatly. This influence, a very small one, may possibly be quite obscured by opposite forces such as growing compulsory attendance for more school hours and more particularly by the increasing number of children who go to high school. . . . An invention may have effects in opposite directions. For example, the radio has caused a revival of old songs, but it has greatly popularized new songs also. It may improve diction and pronunciation yet at the same time encourage certain types of localisms in pronunciation" (pp. 152–153).

is reached, yet one would be bold to say war would certainly have occurred if the cotton gin had never been invented, or that it would have occurred just as soon.

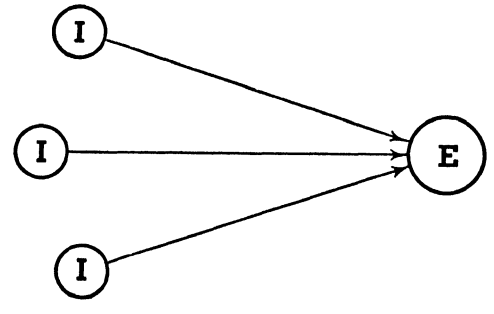
In attempting to get a correct picture of the influence of invention, it should thus be noted that a given invention is often only one of several factors producing a particular result. The increased leisure of women may have been occasioned in part by the invention of the can opener, but it was also affected by the gas stove, the electric washing machine, and many other inventions. It is common knowledge among sociologists that a social phenomenon is almost never produced by one factor alone. In turn, the primary result of an invention is itself only one of many factors producing the secondary derivative influence, and so on. In this manner the force of any particular invention becomes spent in time, much as the force of a billiard ball in motion is dissipated as it strikes another ball, which in turn strikes another.

The derivative influences of inventions often become quite slight when the second and third derivatives are reached. Thus the influence of the tin can in producing woman suffrage was slight. Likewise the effect of the construction of apartment houses on the birth rate was not very significant. The influence of the inventions producing rayon and other silk-like fibers in breaking down class barriers through the cheapness and abundance of silk stockings is overshadowed by other factors. Indeed, the tracing out of the influence of a single invention to these distant derivatives makes the process seem absurd. Yet it is important to note that, while such may be the case with one invention, it may not be so where thousands of inventions are involved. In seeking to account for all the changes now taking place, it would be a mistake to neglect the accumulative effects on society of these derivative influences of inventions. There are many thousands of inventions adopted every year and their cumulative influence is significant in producing the thousands of minor variations and changes taking place in our civilization.

CONVERGENCE, OR THE COMING TOGETHER OF SEVERAL INFLUENCES OF DIFFERENT INVENTIONS

The effects of a number of inventions sometimes accumulate in the same place and thus bring together their respective influences. For instance, the following inventions, mechanical and social, very probably contribute to the decrease in the birth rate: the factory machines, the school, the apartment house, the automobile, the moving-picture theater, child labor laws, advertisements, and compulsory education requirements. While the effect of any one of these inventions is scarcely discernible, the combined effect may be appreciable.

This combining of influences is a very common phenomenon. The growth of suburbs is the result not of the automobile alone, though it is a significant influence, but also



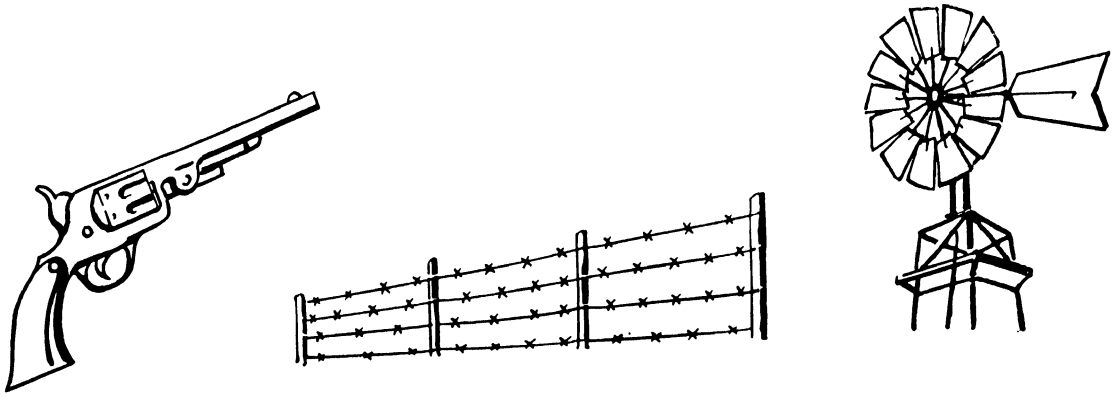
270 Convergence

The influences of several inventions converge to produce a single effect. Thus the influences of the automobile, the railroad, the telephone, etc., converge to increase the growth of suburbs or to deconcentrate the urban population.

of the electric railway, the steam railroad, the telephone, the radio, the moving picture theater, and the chain store. These are all very different material objects and have different uses, yet all are centered on one result; namely, the creation of suburbs, whatever may be the other purposes they serve. It is as though the influence of a variety of inventions were poured into one groove. This grooving of the influences of many inventions seems to be caused by demand. Human beings wish to live in suburbs, where there is more space but where they are still near to the advantages of the great cities, and this desire provides the dynamic directing force. In the previous chapter it was shown that social demand helps to bring inventions into being. It is now seen that social valuation determines also the social uses to which inventions are put. The purpose of the inventor of the automobile was not to create suburbs, nor was that the aim of the maker of the telephone. But the social forces have grooved the uses of these innovations to aid the development of residences on the borders of great cities.

A famous illustration of the converging influences of inventions concerns the settling of the dry treeless area between the Mississippi River and the Rocky Mountains. Pioneers, accustomed to the woodland culture of the East, settled on the Pacific Coast before they settled the Great Plains. The convergence of two new inventions, barbed wire and the six-shooter revolver, and one old one, the windmill, made it possible to settle the Great Plains. Webb, to whom we are indebted for the appreciation of these technological factors in building up this area, shows that the six-shooter enabled the pioneers to defeat the Indians; barbed wire broke down the open range into individual farms; and the power of the windmill provided food for a larger population. Webb vividly pictures the influence of the six-shooter in enabling the early pioneers to win this region from the Indians.

Imagine now a battle between the Texans and the Comanches, and observe the relative advantages in weapons possessed by each. In most respects the Indian had the best of it. In the first place, the Texan carried at most three shots; the Comanche carried two score or more arrows. It took the Texan a minute to reload his weapon; the Indian could in that time ride three hundred yards and discharge twenty arrows. The Texan had to dismount in order to use his rifle effectively at all, and it was his most reliable



271 Inventions Which Aided in the Settlement of the Great Plains

The settlement of the dry treeless Great Plains between the Mississippi and the Rockies was facilitated by the invention of the six-shooter and the barbed wire, and by the adoption of the windmill.

weapon; the Indian remained mounted throughout the combat. Apparently the one advantage possessed by the white man was a weapon of longer range and more deadly accuracy than the Indian's bow, but the agility of the Indian and the rapidity of his movements did much to offset this advantage. . . .

The battle of the Pedernales has good claims to being the first battle in which the six-shooter was used on mounted Indians. Hays and fourteen of his men had gone out from San Antonio to look for Indians, and on their return discovered that they were being followed by about seventy Comanches. A desperate battle ensued in which the Rangers "shot them down with their pistols." Some of the Rangers and more than thirty Indians were killed. . . .

Major Caperton says of the battle: "That was considered the best-contested fight that ever took place in Texas, and it showed that they (the Rangers) could whip the Indians on horseback, . . . the pistols gave them the advantage. That was the first time pistols were used in a fight with Indians."

In 1850 Major George T. Howard of the old Texas army and Captain I. S. Sutton of the Rangers wrote the following testimonial to the effectiveness of the revolvers: "They are the only weapon which enabled the experienced frontiersmen to defeat the *mounted* Indian in his own peculiar mode of warfare. . . . We state, and with entire assurance of the fact, that your six-shooter is the arm which has rendered the name of Texas Ranger a check and terror to the bands of our frontier Indians."

In the light of what has been said the rapid spread of the six-shooter over the whole Plains area is easy to understand. It is not difficult to see why people associate the six-shooter with Westerners of the Plains. Some still believe, such is the force of tradition, that the Westerners "wear 'em low on the right leg, and pull 'em smokin'." . . . Whatever sins the six-shooter may have to answer for, it stands as the first mechanical adaptation made by the American people when they emerged from the timber and met a set of new needs in the open country of the Great Plains. It enabled the white man to fight the Plains Indian on horseback.[2]

[2] Walter P. Webb, *The Great Plains* (Boston: Ginn and Company, 1931), pp. 169–179.

The derivative effects of converging material inventions. In a previous paragraph it was shown how a single invention had a derivative effect. In a similar manner a group of converging inventions may jointly have a derivative effect, flowing from the one direct effect of the converging cluster. The derivative effects of such a converging cluster may be very significant. Thus the city is the more or less direct effect of many manufacturing, transportation, and communication inventions; but the city is the cause of countless numbers of social changes. It increases crime, diminishes the family, takes some functions away from the church and adds others, increases the activities of government, and changes the nature of politics.[3] All these may be said to be derivative effects of the transportation and manufacturing inventions, though directly they are the effects of cities. Clusters of inventions, like the power inventions, converge on some social product, much as the sand in an hour glass converges on the narrow middle neck, from there to spread outward again.

The connections between the converging inventions and the diverging social effects are not always noted by observers. That crime is a phenomenon of city life is more easily recognized than that it flows from the power inventions that made the cities. Yet if a person is assigned the task of trying to trace out the effects of the factory and railroad, it would be a mistake to omit these influences of the city. Likewise, if suburban life causes a greater separation of the husband and father from the family circle and thereby accords more leadership to the wife and mother, this fact should be traced back to the newer transportation and communication inventions of the twentieth century which produced suburbs and separated residence from place of work.

[3] For a discussion of the problems brought about by city life, the student is referred to National Resources Committee, *Our Cities*, Part I, Section 3 (Washington, D.C.: Government Printing Office, 1937).

THE ADOPTION OF INVENTIONS

Social changes are proportional to the extent of adoption of an invention. The existence of one typewriter in a business office did not create a class of female typists working away from home. The adoption of typewriters by thousands of businesses was necessary. The truth of this statement is obvious. Yet its simplicity obscures its significance. For instance, only a few factories until recent years existed in the agricultural states of the southern part of the United States. It is the diffusion of factories into the South in large numbers during the twentieth century that is bringing vast changes to that region in income, in wage rates, in political alignments, in race relations, in attitudes toward the tariff, in labor unions, in the decline of the old South, in the conception of the role of women, etc.

Since social changes depend not merely on the existence of an invention but on its extensive use in an area, we should in look-

Today's a big day in Flint, Michigan.

For, off a Flint assembly line, in all its bright beauty of modern line and contour, rolls the fifty millionth car built by General Motors in the U.S.A.

No wonder Flint has closed all schools for the day. And crowds line the street to cheer a huge parade honoring the event.

After all — this is an achievement without parallel in history.

It's something the people of Flint can understand. They saw it happen. They helped it happen. So it's something that they can celebrate with pride.

But this is something that also calls for celebration in all manner of other towns and cities, spread across the landscape from coast to coast.

Not just in GM plant cities — although in all of them there will be open house for the families and friends and townsmen of our 475,000 employees.

This could well be called an occasion for open house to all America. For an automobile is made up of more than 17,000 separate pieces and parts, and the making of one obscure little part, such as a bushing or gasket or fastener, can become the basis for a thriving local business.

The towns where

So — throughout the length and breadth of the land — are thousands of independent manufacturers who have shared in making this celebration possible.

Some are large — like the ones which ship us vast tonnages of steel and glass every day. Some are small — like the Kentucky sawmill (only 15 employes) producing shipping pallets, or the Indiana chemical company (6 employes) which makes a sweeping compound used in a GM plant.

And in countless communities across the country there are flourishing businesses which, in the truest sense, "built" the town, in the process of building something for General Motors.

Take an Ohio village of 600 population, for instance. Twenty local citizens put up $250 each to build a factory for a "home-town boy." He got his first GM contract, then another and another. In seven years, his volume of business climbed from $22,000 to over half a million and the payroll now totals $200,000 a year. Meanwhile, the village has benefited by population growth, plus a new waterworks and fire department.

ing for causes of social changes consider not only the creation of inventions, but also the extent of their diffusion.

The spread of inventions over the world, especially in Asia and Africa, is a characteristic of the twentieth century. We have seen a new dichotomy of the areas of the world, namely, the division into the developed and the underdeveloped countries. These underdeveloped countries want the improvements that come with the development of their resources. This is done by technology and these countries have remarkable five-year plans to obtain this development. The technology which they want has, much of it, been in existence a long time. But vast changes in Asia and Africa will follow from the extensive adoption of technology in these areas.

Inventions not only spread over an area but they may be withdrawn. They may not be withdrawn completely but in part, or their use may be lessened. Thus we have seen how the use of cavalry has lessened.

dreams come true . . .

In another Midwest village, a supplier of molded rubber parts for GM cars has grown from 70 to 600 employes, with a current payroll of $2,600,000.

In another town, two men cleaned out a barn, installed war surplus machines bought with borrowed money, and started making "fasteners" for General Motors. At last report, their volume of business had climbed to more than $3,000,000 a year, with GM their principal customer.

And so it goes — from an electrical manufacturer in California, to a textile mill in Georgia, or a tack factory in New Hampshire.

Fact is, the roll call of those who shared in the building of our first 50 million cars and trucks includes more than 21,000 businesses, engaged in supplying materials and parts to 121 GM plants throughout the country. And beyond these 21,000 direct suppliers are countless thousands of other businesses which are in turn suppliers to them.

But we still haven't taken account of the raw materials, such as asbestos from Arizona, bauxite from Arkansas, beeswax from Wisconsin, copper from Montana, flaxseed from Minnesota, manganese from Tennessee, sulphur from Louisiana, tin from South Dakota, tung oil from Florida, tungsten from Nevada, wheat straw from Nebraska — something, in truth, from every state in the union.

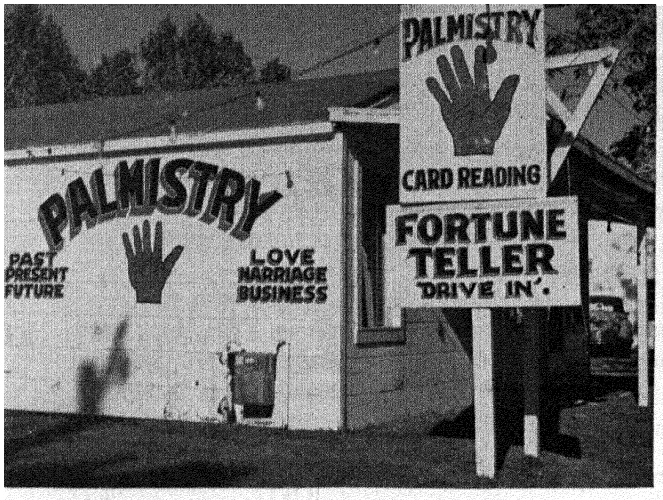
Nor have we mentioned the 18,000 local businessmen, our GM car and truck dealers, and their 200,000 employes, who sell and service the vehicles GM factories have produced.

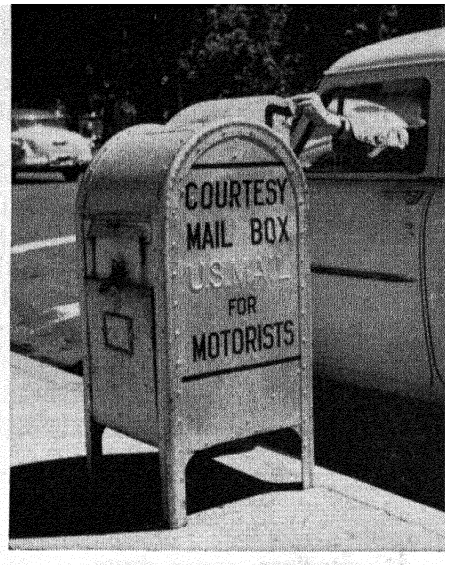
So it's a big day in Flint — and a big day in every town where men with practical dreams, and the courage it takes to make dreams come true — continue to make this a better land to live in.

Our thanks go out to them, and to the spirit they represent, for making this big day possible.

272 **The Impact of the Automobile on the American Economy**

This General Motors ad is no exaggeration. In 1950, 1 in 20 employed Americans worked in the manufacture and retailing of motor vehicles and accessories, in servicing gas stations, repairing cars, and providing taxi and trucking service — not to mention the many people who supplied the raw materials or those involved in financing, insuring, and advertising cars. So vast are the ramifications of the automotive industry that economic analysts watch it closely for signs of health or illness in the economy as a whole.

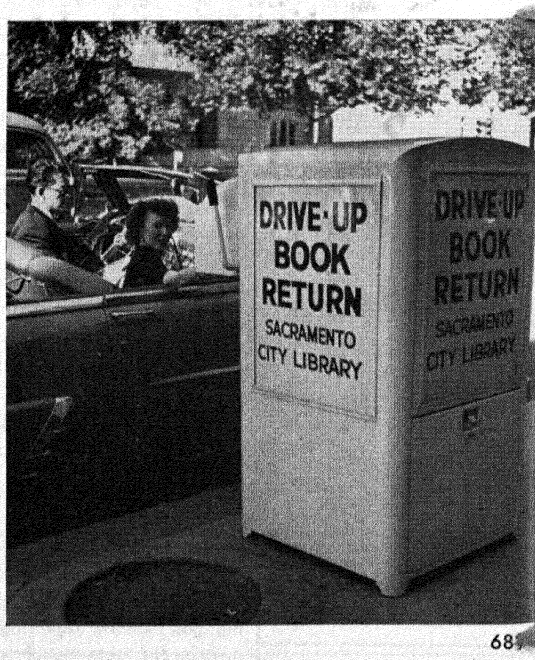




273 Increasing Adjustments to the Automobile

The automobile is an innovation with far-reaching influences on place of residence and work, recreation, standard of living, morals, and many other aspects of social life. The widespread diffusion of the automobile has led in the United States to more and more drive-in services. To the drive-in restaurant, motion picture theater, and bank, there have been added drive-up dry-cleaning, library service, mail boxes, and even fortune-telling. (Photographs from the Ford Motor Company.)





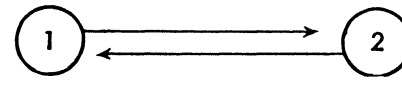
An invention which has been abandoned may be reintroduced. Thus the striking together of two hard objects to obtain fire was abandoned about a century and a half ago. But recently this invention, in somewhat modified form, has been reintroduced in the pocket lighter, which, however, uses oil or its derivative instead of tinder. The revival of an old invention is, in its effect, somewhat like the creation of a new invention.

Sometimes the decreasing use of an invention and an increasing use of it alternate rapidly. Such is the case in the use of factories during depressions and prosperity, with significant social consequences. The withdrawal of factories from production by failures or by shutdowns leads to a business depression and unemployment. With a revival of demand there is more use of factories with a lessening of unemployment and a period of business revival leading to prosperity.

Another illustration is the organization of the college curriculum. In the nineteenth century, the organization was based on required courses. Then with the twentieth century came the elective system, but in the middle of the century there has been a revival of the system of required courses. Fashion is notably oscillating in women's dresses and figures.

Sometimes the extension in the use of a cultural form or its abandonment is exceptionally rapid. This effect will be discussed in the next paragraphs.

The spiral. When the supply of money is increased faster than the production of goods, prices rise. The rise in prices creates a demand for more money, which the banks sometimes issue. This additional increase in money raises prices again. The new rise in prices may lead to still more money. This phenomenon is called the inflation spiral. An analysis of this phenomenon follows.



274 The Feedback in a Spiraling Social Situation

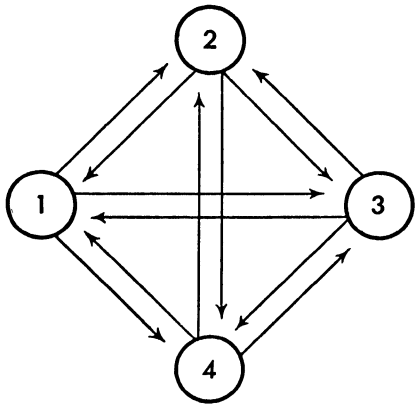
An increase in poverty represented by (1) in the figure above, increases disease, represented by (2). But an increase in disease also accentuates the poverty. This additional increase in poverty further increases disease. And so on. This phenomenon has been called a "vicious circle." It is also known as a spiral. The design above is not, of course, a design of a three-dimensional spiral but merely suggests the circular or feedback effect involved in spiraling social situations.

In a previous section of this chapter dealing with succession, we showed that a change often produces a series of derivative changes, (1), (2), (3), (4), and so on as shown in Figure 269. But in the case of the spiral, the derivate effect of (1) on (2) is turned back on (1) as shown in Figure 274.

Sometimes more than two elements, such as money and prices, are involved. An illustration of more than two elements can be seen in the rise in the status of Negroes.[4] A lessening of discrimination against Negroes (1) as resulting, say, from a court decision, which is like an invention in non-material culture, may increase their wages (2) by extending employment, increase their education (3), and improve their housing (4). But a raise in wages lessens discrimination, increases education, and improves housing, while better education raises wages, lessens discrimination, and improves housing. And improved housing affects the other three factors.

This pattern of interlocking factors is shown in Figure 275, and these factors are clearly a social system as defined in Chapter 16. The figure represents a social system in motion.

[4] Gunnar Myrdal, *Development and Underdevelopment* (Cairo: National Bank of Egypt, 1956).



275 A Spiraling Social System

Social systems often contain more than two elements. Thus in a system relating to Negroes, (1) represents discrimination, (2) wages, (3) education, and (4) housing. A decrease in discrimination increases wages, education, and improves housing. And an increase in wages lessens discrimination, increases education, and improves housing. And so on. This spiraling effect accelerates the improvement in the status of the Negro.

Gunnar Myrdal has signalized this process and calls it "a circular cumulative accelerating process." [5] The effects of the process accumulate, and the social changes are accelerated. This spiraling social system of factors affecting the status of Negroes brings improvement much more rapidly than would occur were the process not circular. Thus we have the analytic basis for the old adage "Nothing succeeds like success," as Myrdal remarks.

The spiraling of social changes may mean also that China and India will industrialize rapidly. Myrdal thinks that the social systems of developed countries are spiraling more rapidly than those of unaided underdeveloped countries and that hence the gap is widening between the developed and the underdeveloped countries.

It is also true that nothing fails like failure, for spiraling may be downward as well as upward. Such is the case in business depressions; when the market for products declines, factories curtail production or shut down. The laying off of workers decreases the market still further, and production is cut further, and more unemployment results, and so on. The process moves very quickly.

There are limits to the spiraling process of social change. Business depressions come to an end sometime, as shown by the business depressions of the nineteenth century. In the twentieth century, governments have developed a policy of trying to stop the downward spiral. In the United States in the 1930's the government tried to put a floor under falling wages and failing businesses. It also tried to halt the falling market by extending purchasing power to the people. Governmental action is also advocated to prevent the deterioration of backward areas, to stop the spiraling process.

There are many reasons why a spiraling process slows down. One reason is that the spiraling social system is not a closed system free from outside influences. The elements in a system are generally related not only to each other but also to elements outside the system, as shown in Figure 276. Thus the wages of Negroes cannot be raised indefinitely, for they are related to the general wage level, to the economics of business, and to the productive requirements of the nation. So also the education and housing of Negroes are tied to a number of outside factors.

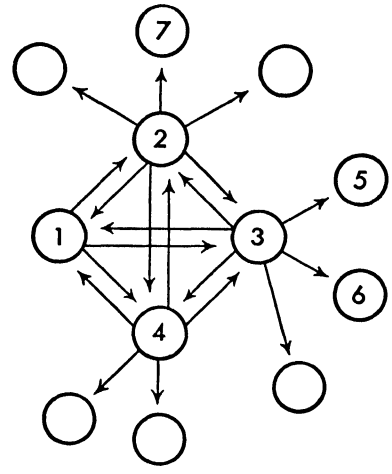
The interconnection of a spiraling social system with outside factors slows down the spiraling and will eventually bring it to a stop. This delaying effect of interconnecting linkages also produces lags.

The concept of a spiraling social system is not unrelated to nationalism, one of the impressive phenomena of our age. For a nation may be seen as a social system. The various social institutions within the boundaries of a nation are much more closely connected with each other because of common language, customs, and traditions than

[5] *Ibid.*

276 Limitations of Social Spiraling

Spiraling cannot go on forever. One of the limitations is due to the fact that the system is not a closed system as implied in the two preceding illustrations of spiraling. When a system is not closed, the elements of the system are connected with elements outside the system. Thus, in the illustration in Figure 275 regarding the status of Negroes, education, indicated by (3), is related to taxation (5) and employment (6); and wages (2) is related to the wage level of all workers (7). These interconnections with outside elements may retard spiraling.



they are with institutions outside the nation's boundaries. This integration of institutions is spelled out in Chapter 22 in some detail, though not on a national basis. The integration of institutions within a nation suggests an approximation to a closed system. Spiraling within a nation is more probable than within a league or confederation of nations. Vigor is imparted to the spirit of nationalism because of the spiraling process.

This acceleration of cultural change can be seen from yet another illustration. Cultural change occurs with the introduction and adoption of a new element or invention, broadly defined. A new element or invention is nearly always a combination of existing elements. Thus an invention, *i*, is a combination of elements e_1, e_2, e_3. . . . So the more elements there are, the more the inventions that are possible. Three different elements, *a*, *b*, *c*, can be combined two at a time in three different ways: *ab*, *ac*, and *bc*. And four elements, *a*, *b*, *c*, *d*, can be combined two at a time in six different ways: *ab*, *ac*, *ad*, *bc*, *bd*, and *cd*. Five elements can be combined to produce ten different pairs, and so on. Where the number of elements is very large, the number of combinations becomes huge. Not any random combination will make an invention, of course. But the larger the number of random combinations, the larger the number of possible inventions, even though only one combination — say, one in a million or one in ten million combinations — makes an invention. So it would seem that the larger the number of elements in the cultural base of the superorganic at any one time, the greater is the possible number of inventions. Some loose-talking optimists have been heard to say that today we can make any invention we want to. Such a statement is a gross exaggeration. For there are many factors that limit the making of an invention and its adoption. What has been shown in this and preceding paragraphs is that there is an analytical and logical basis for an acceleration of growth and change in culture. But in the practical world acceleration is always restricted and at times it becomes deceleration. Some of these limitations and restrictions will be discussed in the next section.

INVENTIONS IN NON-MATERIAL CULTURE

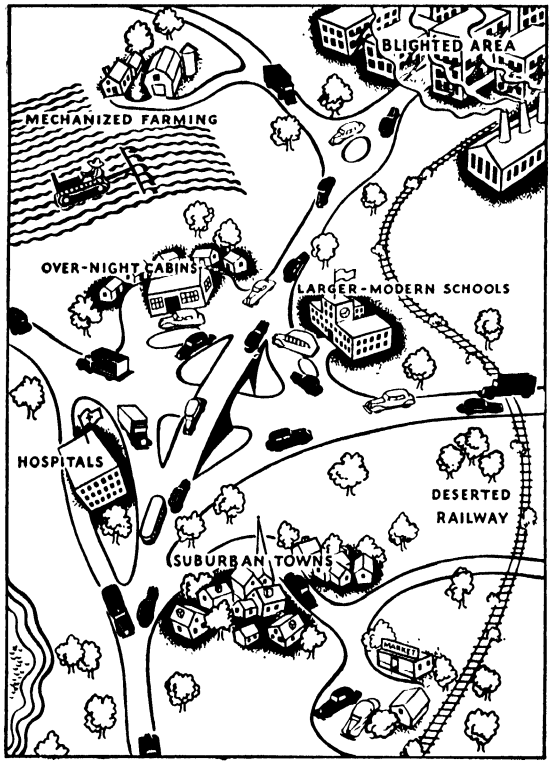
Social inventions. Social changes are often merely variations in existing practice. Thus the automobile may increase the tendency for summer hotel guests to remain for shorter stays. The change is to produce a variation in length of visit of summer hotel guests. No new thing is created, though this change in the nature of tourist trade

may have radical effects upon the summer hotel business.

On the other hand the variation in society caused by a mechanical change may be sufficiently great to justify the assignment of a new name to the social effect. Thus travelers have stopped overnight or longer at camps, inns, or hotels; yet the automobile has produced a variation sufficiently different to be called a "motel," and to justify the characterization of it as a social invention. Invention is commonly associated with material objects. That there are inventions which are not material but social is indicated by the following random sample of social inventions.[6]

277 The Social Effects of the Automobile

The influences of the automobile on society are so numerous that they are incalculable. The sketch below shows a few of the important ones. (From W. F. Ogburn, *Machines and Tomorrow's World*, published by the Public Affairs Committee of New York City.)



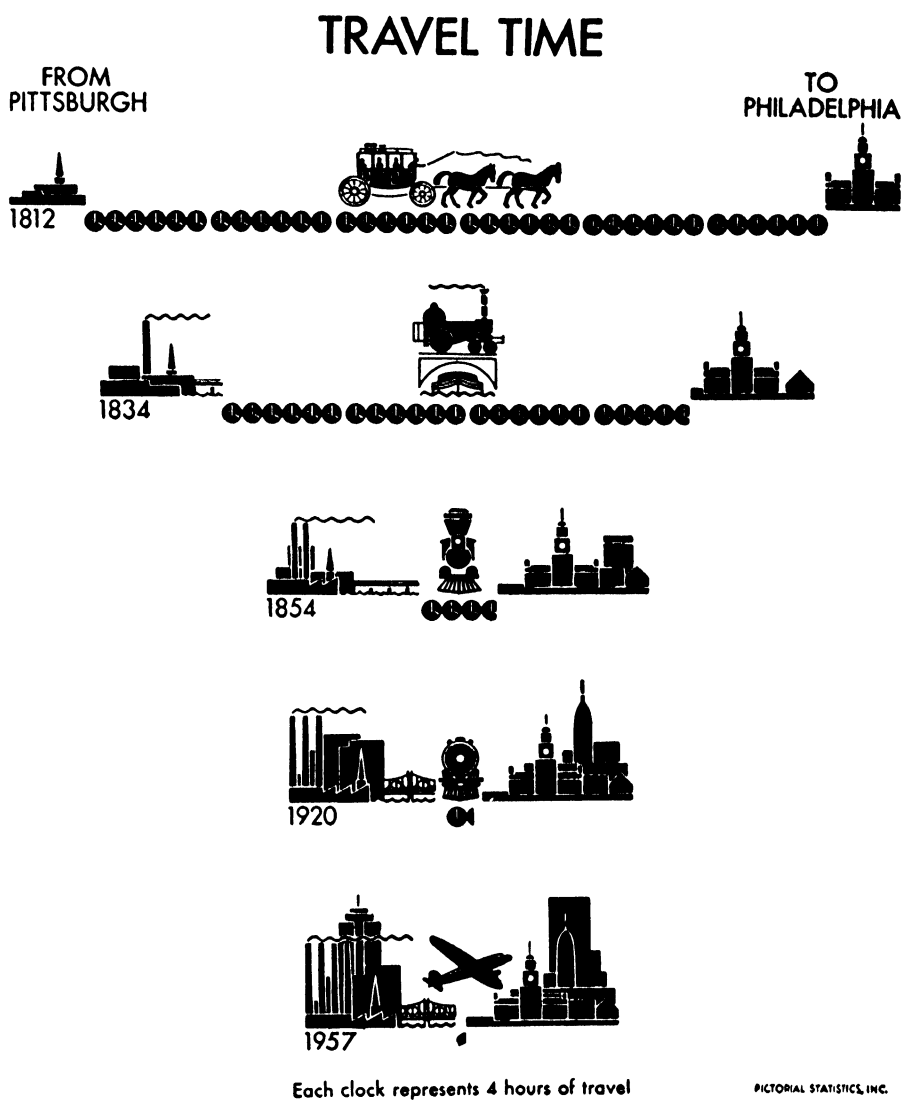
Boycott
Chain store
Charity organization society
City Manager plan
Civil service system
Clearing house
Community chest
Company union
Correspondence school
Day nursery
Direct primary
Federal Reserve System
Four-H clubs
Group insurance
Holding company
Indeterminate sentence
Investment trust
Installment selling
Junior college
Juvenile court
Ku Klux Klan
League of Nations
Legal aid society
Lockout
Matrimonial bureau
Motel
Mother's pensions
National economic council
One-step dance
Psychological clinics
Proportional representation
Recall
Research Institute
Rochdale co-operative
Rotary club
Secret ballot
Seminar
Sitdown strike
Social settlement
Summer camp
Tag day
Visiting teacher
Universal suffrage

A social invention is a creation of a new grouping of individuals or of a new custom or form of social behavior.

Inventions, other than social, in the non-material culture. Social inventions and mechanical inventions are not the only ones. Thus the novel is an invention which is neither social nor mechanical. It is an invention in literature, as cubism is an invention in painting, as the symphony is in music. Other examples are the alphabet, Esperanto, decimal point, intelligence test, minimum wage law, patent, piece-rate system of payment, and a visa. Scientific discoveries in applied science, such as a radio beam, often lead so directly to mechanical inventions, or have such other close resemblances to them, that by convention they are treated together, even though a discovery in applied science is in non-material culture.

In the following paragraphs we shall inquire whether the social effects of non-material inventions, particularly social in-

[6] *Recent Social Trends*, p. 162.



278 **The Shortening of the Hours of Travel**

The flying time between Pittsburgh and Philadelphia in the fast transport planes of 1957 is one hour and twenty minutes. The change in travel time is well illustrated by the fact that some years ago a pilot in an airplane covered in one day all the distance that George Washington traveled throughout his whole lifetime.

ventions, follow the same patterns as those of mechanical inventions.

The Social Effects of Social Inventions

The causes of social change are, of course, not confined to mechanical invention and discovery in applied science. Social inventions cause social changes, too. Such indeed is the purpose of social legislation. A graduated income tax has the social effect of distributing wealth.

Convergence. If the income tax is sharply graduated and is supplemented by

social legislation giving benefits to the less wealthy in the form of social insurance, then the effect is to take money from the rich and give it to the poor. In this case there are two or more social inventions converging to effect the result of redistributing wealth. Similarly, another pair of social inventions, child labor laws and legislation making school attendance compulsory, have changed the family functions by reducing the control of parents over their children. In these cases there is the phenomenon of convergence.

Succession. The influence of a social invention extends also into derivative effects, like the links of a chain. The effect of the prohibition of the sale of intoxicating liquors in the United States from 1919 to 1934 was not confined to altering the drinking habits of the population. The force of this innovation continued until criminals developed a highly organized business based on gang warfare. As a secondary derivative effect of prohibition, there were repercussions in the courts, in prisons, and in politics.

Dispersion. That a social invention may have many influences extending in different directions, like the spokes of a wheel, is illustrated by war. In the World Wars, the war establishment in the countries of the combatants influenced the whole range of social institutions. There was hardly an industry that was not affected. Farmers felt the shortage of labor. Women went to work outside the home as never before. The marriage rate and the birth rate were affected. The curricula of schools and colleges were changed; news was censored. Money was worth less than it had been before. The influences of war and war preparations extended outward in many directions throughout the social realm. It may be concluded, then, that social inventions are much like mechanical inventions in the effects they have on society.

Social inventions as a source of technological inventions. Social inventions also cause mechanical inventions. It has been shown (*a*) that mechanical inventions cause social inventions; (*b*) that social inventions bring about other social inventions; and (*c*) that mechanical inventions lead to the development of other mechanical inventions. It is also true (*d*) that social inventions cause mechanical inventions. For instance, the new building codes in New York City, restricting the height of buildings and providing for more light, led to a new type of tall building construction that tapers off to a point, somewhat after the manner of a pyramid. Another illustration is the machine that grades examination papers. The invention of the true and false type of examination, when used on a large scale, led to the invention of a mechanical grader. A final illustration is the invention of a machine that signs checks, which is said to be the result of the social invention, the Agricultural Adjustment Administration, one of the early measures of the Roosevelt administration. The fact that A.A.A. had to send out checks frequently to millions of farmers in payment for reduction of acreage in crops, necessitated the invention of such a machine.

That changes in social conditions bring about mechanical inventions is another proof of the old adage that necessity is the mother of invention. The social inventions named in the preceding paragraph developed needs for mechanical inventions. New social needs due to social changes are indeed a greater cause of mechanical invention than are specific social inventions. Thus war has been at various times in the past a developer of mechanical invention. War is a change in social conditions. It may also be argued, of course, that war is a social invention which is put into operation from time to time. War was responsible in modern times for the invention of the tank and for various types of explosives and guns. The World Wars led

to a great spurt in the production of wartime inventions in the United States. The number of these inventions sent to the Naval Consulting Board was so great as to require an office force of 18 persons to handle them. At the peak of this period of inventiveness as many as 600 letters a day were received.[7] Not all these inventions were workable. In fact only a very few were considered by the Naval Consulting Board to be meritorious and practicable.

In discussing further the interrelations between social conditions and mechanical inventions, we may note that we readily find many more social conditions arising from mechanical inventions than mechanical inventions resulting from social conditions, unless social conditions are defined loosely as any human need. The relative ease with which social conditions can be traced to technological changes and the relative difficulty in finding mechanical inventions due to social changes is an empirical observation that is important in understanding why the superorganic changes in modern times.

PRIORITY IN SOCIAL CHANGE

It is clear that social conditions bring about mechanical inventions and also that mechanical inventions cause changes in social conditions. But it is desirable to know which sequence is the more common. A comprehensive generalization on this point has not been established, but at the present time in the modern world, it appears easier to find illustrations of technology causing changes in social conditions. Hence we are inclined to favor the hypothesis of the greater importance of the sequence of technology causing social changes.

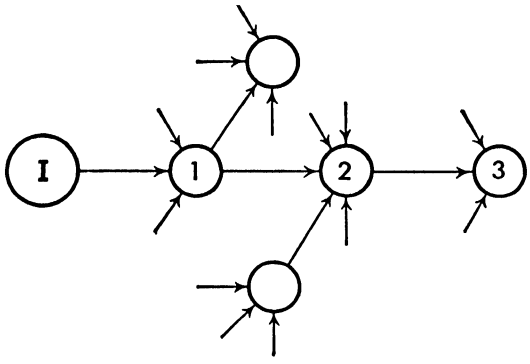
Priority of mechanical inventions as causal factors. By using the method of priority and sequence a good deal can be learned about how much mechanical invention influences social change. The invention of barbed wire preceded the breaking up of the cattle country of the Great Plains into small farms. In 1874 the barbed wire was first sold in the United States, and by 1880 over 80 million pounds had been sold. The sequence alone, of course, does not establish a causal relation. The events of today precede all those of tomorrow, but every event today is not a cause of every event tomorrow. The causal connection must be established aside from priority. In the case of the barbed wire, historical research shows the prohibitive cost of wooden fences in a treeless country and demonstrates the enormous sale of barbed wire to fence off the farms. "Barbed wire made the hundred-and-sixty-acre homestead both possible and profitable on the Prairie Plains."[8]

The problem is complicated where there is a long chain of causes and effects. Thus, in the series *D*, *e*, *F*, *G*, it is noted that *D*, a social invention, is influential in producing *e*, a technological invention, which in turn has an effect on social condition *F*, and so on. To pick the mechanical invention *e* out of this series and say that it influences *F* or *G* seems arbitrary. Why not start with *D*, the social invention, and say that it causes a mechanical invention and later social changes? The justification for singling out any one item in such a series is its importance in reality, not in a schematic arrangement.

For instance, consider the following sequence. The interest in sports led to the invention of basketball, which in turn gave to small towns an *esprit de corps* because of the inter-town rivalry. The interest in sports which led to the invention of basketball is thus a very general cause of inter-town competition. Basketball, however, seems more specific, and its invention can be noted as

[7] Lloyd N. Scott, *Naval Consulting Board of the United States* (Washington, D.C.: Government Printing Office, 1920), p. 123.

[8] Walter P. Webb, *op. cit.*, p. 318.



279 The Process of Inventional Influences

The combination of derivative effects and convergence forms a complicated and interconnected process. The figure above shows that the influence of invention (I) on its first derivative effect (1) is only one of three. The influence of Derivative 1 on Derivative 2 is one in five; therefore the influence of the invention (I) on Derivative 2 is only one in eight. Thus the influence of an invention lessens as the derivative influences increase.

something so definite as to be dated. The rather specific and definite nature of a mechanical invention gives it particular force as a cause of social change.

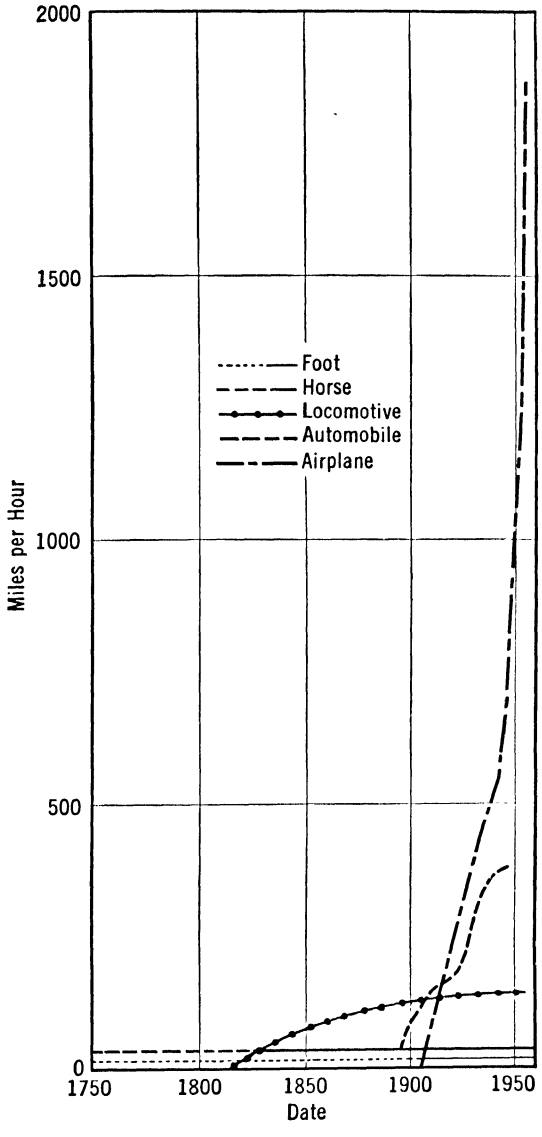
There are, of course, illustrations of social inventions which are as definite and specific as mechanical inventions. During World War I the farmers in the United States were called upon to help feed the soldiers in Europe, which led to the plowing of many new areas of land which continued to be cultivated when the soldiers returned to the soil, which in turn led to an agricultural surplus and to the depression of the nineteen-twenties. The war is specific and definite, hence the connection of the agricultural depression with war can be readily traced. If all social changes were sharp, new, definite, and precise, it would be easier to identify them as causes of further social changes.

In a schematic sense, as suggested in the series of alphabetical letters listed before, there is no such thing as an origin, if the question of degree be omitted. Any one change that may be chosen was set in motion by something else, which was also in motion, and so on back to so-called ultimate causes. Similarly for changes in the social heritage as a whole, priority may not be assigned either to the material culture or to the non-material culture, for changes in the non-material culture may be influenced by changes in the material culture, which were previously due to changes in the material culture, which were previously due to changes in the non-material culture, and so on. When all the interconnected parts of a culture are in motion, and each part exerts a force on some other part, the origin of the motion cannot be located.

Influence of ideas and ideologies. Since all social change takes place through the medium of ideas, there naturally arises the question, whence came the ideas and what are their influences? In answering these questions it may be stated, for the purposes of analysis, that there are two extreme types of ideas: those that center upon facts and material objects and those that center upon fantasies.[9]

Ideas of the latter kind may originate from man's aspirations, fears, or other emotions; such ideas are called beliefs. Such was the idea that the world would come to an end a thousand years after the birth of Christ, a belief not closely related to fact. On the other hand, ideas may originate from observation of phenomena, as in the case of knowledge of how to navigate a boat. Still other ideas are mixtures or approximations of the two types. Indeed, ideas of fact and of fantasy are probably the extremes on a scale of ideas with various gradations between. An example of an idea between fact and fantasy is the central idea in the *laissez-faire* doctrine of the functions of the states. Many individuals want to believe that that government is best which governs least, and that the economic forces are self-adjusting

[9] Carl G. Jung, *The Psychology of the Unconscious* (New York: Dodd, Mead and Company, 1927).



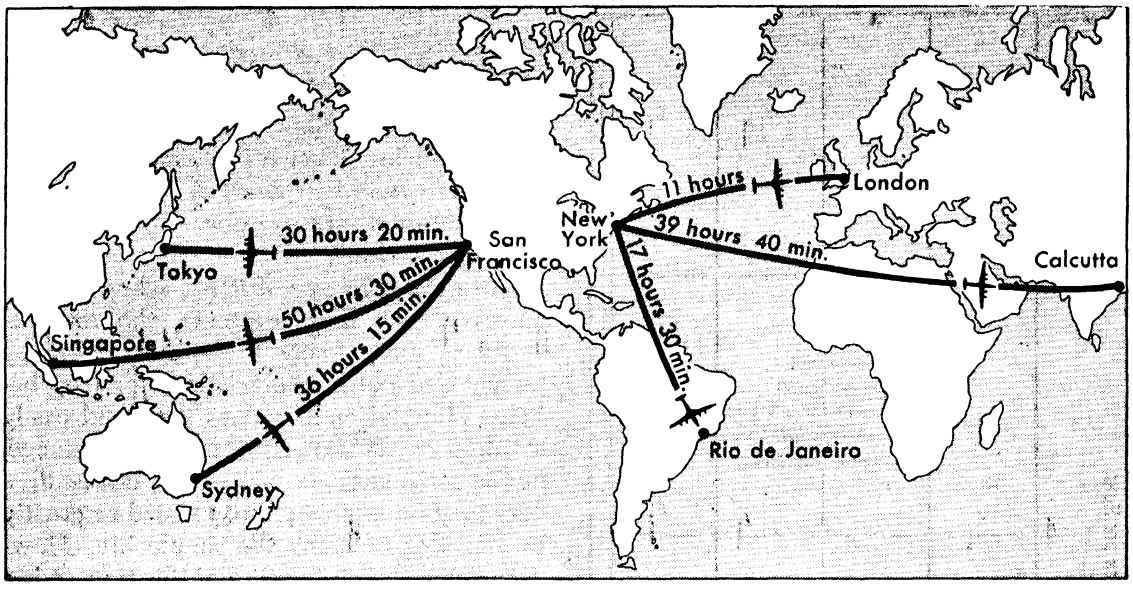
280 **Increasing Speed of Travel**

Ever increasing speeds have been reducing the size of the world in terms of travel time. (Chart from F. R. Allen *et al., Technology and Social Change,* New York, Appleton-Century-Crofts, Inc., 1957, p. 33.)

as they supply our needs. Hence to such individuals this social philosophy is wishful thinking. On the other hand, many governments have done reasonably well by following a policy of modified *laissez-faire*. So some ideas are based partly on wishes and partly on observation. To sharpen the presentation, the two extremes of ideas — those originating from accurate observation of phenomena and those arising from subjective emotions — will be spoken of as though they were different types rather than the two ends of a series.

As to the influence of ideas, wherever and however they may originate, the material world is more likely to be influenced by factual and observational ideas than by beliefs. Material culture does not bend easily to ideas of the fantasy type. For instance, in the strenuousness of modern civilization, man may occasionally be appealed to greatly by the idea of living the simple life. However much the desirability of this type of life may be preached, it is rather difficult in these days of watches and modern commercial competition for many people to return to the simple life. Nor, to cite another illustration, does admiration for the old type of family life bring it back in the face of factory production and the apartment house.

Ideologies of the fantasy type do, of course, affect the material culture. Wishful ideas about national glory may cause a small nation to engage extensively in military preparations. Such ideas may steer the nation away from the advantages of free trade and cause it to adopt high tariffs and other policies that favor factories and chemical industries. The ideas of race held by the National Socialists of Germany had no basis in scientific anthropology or biology, yet they played a role in building up a self-sufficient economy in material goods. Other cases frequently cited are the Crusades of the Middle Ages and the present ideologies in Soviet Russia. As to the Crusades, the religious ideas back of them affected the social behavior of the peoples rather more than their technology. The Crusades led to the opening of trade routes and may have had some influence on material methods of transportation, though such an effect is not known definitely. There are those who



281 **Flying Timetable**

To travel around the world took 72 days in 1889, 35 days in 1913, and 4 days in 1957. To travel from New York to Calcutta by sea takes three weeks; by plane, 40 hours. The map shows the elapsed time from origin to destination in regularly scheduled passenger flights in May 1957 (Pan American World Airways System). Improved jet planes are making current schedules obsolete.

claim that the economic motives back of the Crusades, resulting in more trade, were less of a fantasy type than were the religious wishes.[10]

A somewhat similar point may be made regarding the Marxian ideologies used in the origin of Soviet Russia. These ideas have had a great influence on social organization during the brief period of the existence of the Soviet Union. How this organization will be modified by social forces in the future is a question. The influences of these ideologies on technology are less apparent. They have led to the adoption of the machine techniques of mass production, as have also the ideologies of fascism and *laissez-faire* capitalism.

It is not suggested here that fantasies have no influence on technology, but rather that observational ideas have a greater influence. More will be known about the influence of ideas in our society later, when there will have been more opportunity to observe the effects of propaganda and advertising. The claims of very competent propagandists, that given enough money they can make the people believe anything, on any subject, are extreme in view of the limitations imposed by the material and scientific world.[11] The origin and influence of social philosophies, such as individualism, eugenics, or communism, indicate that they are a blend of the fact type of idea and the fantasy type.

Influence of Technology on Social Institutions

Social institutions in general are the special province of sociology, rather than of

[10] E. R. A. Seligman, *The Economic Interpretation of History* (New York: Columbia University Press, 1907).

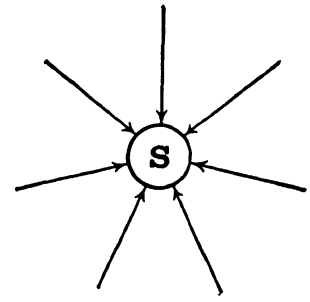
[11] See also the latter part of Chapter 8 for further discussion of this matter.

the other social sciences. Hence the subject of change in social institutions needs especially to be discussed. The great social institutions are rather stable organizations lasting over long periods of time and found in nearly all cultures. They are not likely to be modified greatly by a single invention. Dramatic or profound modifications in such great institutions require the influence of clusters of inventions.

Industry. Perhaps the most striking change in modern times is the change in economic organization, seen in the virtual creation of modern production and distribution by the power inventions and various power-using machines made from the metals. Industry has been taken from the household and new types of economic organizations have been set up, such as factories, stores, and banks. The inventions of the factory and railroad grouped industry into huge closely packed cities; now the automobile and electricity are tending to scatter industry, especially the lighter types which can readily use the truck, away from the center of big cities.

Family. Modern technology, in taking industry from the household, has radically changed the family organization.[12] It has placed man's work, except in agriculture, wholly away from the homestead and has removed nearly all woman's economic duties except cooking, house-cleaning, and a little sewing and laundering. The inventions affecting the birth rate are reducing the size of the family, and both the above-mentioned sets of inventions are increasing the number of divorces and separations and rendering marriage more unstable.

Church. The Church has been least affected by modern inventions, although the church is much less a central comprehensive social organization in modern municipalities than it was in rural districts several generations ago. The church has, moreover, been profoundly affected by discoveries in science, which have changed the nature of religious rituals and creeds.



282 The Impact of Inventions

A social institution is affected by many different mechanical inventions. Thus the family as a social institution has been modified by the steam engine, electricity, the automobile, the elevator, birth control, and other inventions and techniques.

State. The modern state has been influenced by two sets of inventions, the production inventions and the communication inventions. Power production meant the transfer from the family to the state of such functions as the protection of the aged through old-age insurance, and provision for the young through schools, child labor laws, health measures, and juvenile courts. The transportation inventions meant the growth of the area covered by the state. It meant an interpenetration of economic life, and with the printing inventions, helped build up group solidarity. Nationalism, moreover, is now being encouraged by the chemical inventions. Finally, these same transportation and communication inventions are leading to a shift of functions from local government to the central government of the whole state. It is evident that the great social institutions are affected by changing technology.

Custom and attitude. Institutions also have important psychological aspects; and personal reactions vary, as can be

[12] W. F. Ogburn and M. F. Nimkoff, *Technology and the Changing Family* (Boston: Houghton Mifflin Company, 1955).

seen in politics, in family life, among employees and employers, in the church, and in the community. The psychological aspects of modern institutions are not, however, so much the causes of institutional change as they are the result of the changes caused by technology. For instance, the employer and the employee in the days of the handicrafts had a personal relationship because they knew one another well and understood fully the requirements of the tasks undertaken. These psychological attitudes did not change into misunderstandings, lack of sympathy, strikes and boycotts, and thus lead to large-scale industry adopting modern technology. Rather, the technology developed the large-scale industry and the present psychological attitudes of employee and employer resulted. Hence characteristic institutional behavior follows changes instigated by technology.

SUMMARY

Mechanization is one of the most striking and pervasive phenomena of our times. Unfortunately, its study has been neglected by the social sciences, which have not sufficiently recognized that while technology itself belongs to the field of the natural sciences, its far-reaching effects on social life make it a vital subject for study by the social sciences.

This chapter has undertaken to show something of the effect which advances in mechanization and applied science have had on modern social life. The numerous direct social effects which a major material invention may have were illustrated by the case of the radio, for which over a hundred immediate significant consequences were indicated. Moreover, it was shown that the first social consequences of an invention continue to move outward like ripples in a pond. In the case of the cotton gin, it was seen that, apart from its immediate effect of increasing the amount of cotton planted, it played a significant role in causing the further growth of slavery, and later the Civil War. While these derivative effects become increasingly attenuated the further they extend, they are of great significance because of the tremendous number of inventions adopted every year.

When the effects of a number of inventions converge, their influence is even more noteworthy. This was shown for the city, which is essentially the direct result of the manufacturing and transportation inventions. And, as in the case of single inventions, clusters of inventions have significant derivative influences; the city, for example, fosters crime, suicide and divorce.

Technology produces social change, but it also may produce social inventions. Occasionally a single material complex is responsible for a new social element, as in the case of the automobile ushering in the trailer park. But generally a number of material inventions converge to yield a new social invention, as was shown to be true for social insurance. Social invention, however, need not depend on material elements but may develop independently. Examples given included the Juvenile Court, the boycott, and the seminar. Such social inventions, like mechanical ones, also have social effects, which may carry on, as well, into derivative effects. Both mechanical and social inventions are thus important factors in social change, as are also innovations, other than social, in the non-material culture. The former, however, tend to be more definite and specific, can be dated, and thus are more readily identified as origins of change.

All social change takes place through the medium of ideas. Some ideas flow from observable facts and others from fantasies, while still others represent a combination of the two. Material culture is influenced largely by the first type, while such aspects of the social heritage as literature, art, re-

ligion, and social philosophy may conform to the second type, or to a blend of the two. Particularly noteworthy is the influence of technological change on the great social institutions. Modern industry is seen to be the virtual creation of the power inventions and the various power-using machines made from the metals. Some of the derivative effects of the economic changes have been great, as in the case of the family. Dramatic too have been the effects of certain inventions such as the effect of contraception on the birth rate and on morality. Religion has been least affected by material developments, since its essential concern is with non-material values, but even here doctrines have been radically affected by scientific discoveries. Next to the economic organization, the state has been most strongly influenced by changing technology, principally by the production inventions and by those of communication. These have helped to extend both the area of the state and the scope of its functions.

QUESTIONS FOR DISCUSSION

1. Why do we give special consideration to technological developments as a cause of modern social changes?
2. What difficulties lie in the way of tracing the derivative social effects of an invention? Illustrate with the automobile.
3. Why are the cumulative influences of inventions so important? Explain, using the growth of suburbs as an illustration.
4. In what sense may modern crime be said to be a result of the power inventions?
5. May a mechanical invention bring about a social invention? Vice versa?
6. How have various social inventions changed the functions of the family?
7. How has the use of the airplane in warfare changed the status of the urban noncombatants behind the firing line? How has the airplane affected diplomacy?
8. What inventions helped to produce the modern city? What inventions are changing its nature?
9. What are some of the social effects of the social invention of old age insurance?
10. What social changes may be expected from the great developments which are now occurring in industrial chemistry?
11. Can the effects of an invention be fully anticipated? Why?

TOPICS FOR REPORTS

1. Sketch the multiple social effects of television, using the account of the radio given in this chapter as a model.
2. The report of the President's Committee on Technological Trends.
3. The immediate and derivative social effects of war.
4. The social effects of the auto trailer.
5. The effects of recent inventions upon education.
6. Outstanding social inventions of the twentieth century.
7. The effect of modern communication inventions on international relations.

SELECTED READINGS

ALLEN, F. R., *et al., Technology and Social Change.* New York: Appleton-Century-Crofts, Inc., 1957.

The first comprehensive and systematic treatment of the subject by sociologists.

BURLINGAME, ROGER, *Backgrounds of Power.* New York: Charles Scribner's Sons, 1949.

This book is the latest of three quite readable books on the significance of technology in American history and shows the influence of technological clusters as a basic factor in social development.

CHASE, STUART, *Men and Machines.* New York: The Macmillan Company, 1929.

The effect of modern technology on society is effectively set forth by the author. Some of the more serious effects of the machine, especially on the lives of workers, are charted.

COTTRELL, WILLIAM F., *Energy and Society.* New York: McGraw-Hill Book Company, Inc., 1955.

A valuable book on a single technological development with correlated inventions. Leslie White has also studied energy over the whole range of culture. Cottrell is concerned largely with economic development and related social changes.

DEWHURST, J. FREDERIC, and Associates, *America's Needs and Resources: A New Survey.* New York: The Twentieth Century Fund, 1955.

Chapter 24, "Technology: Primary Resource." Technology is shown to be the prime mover of production, which is the basis of income, and also of consumption. The discussion is, however, rather general.

FURNAS, C. C., *The Next Hundred Years.* New York: Reynal & Hitchcock, 1936.

An excellent account of the major trends in science and their possible future development, with considerable speculation on how they may affect human happiness and welfare.

GILFILLAN, S. C., *Sociology of Inventions.* Chicago: Follett Publishing Company, 1935.

This book really deals primarily with the social conditions giving rise to invention, but Part VII is especially concerned with some of the effects of inventions and contains some very pertinent observations.

MEAD, MARGARET, (ed.), *Cultural Patterns and Technical Change.* Paris: UNESCO, 1953.

On the basis of a study of five miscellaneous cultures, some advanced and others not, an analysis is made of the impact of technical change on several aspects of culture, as, for instance, agriculture, nutrition, health, and education. The book contains valuable material, though there is little on processes of change.

MUMFORD, LEWIS, *Technics and Civilization.* New York: Harcourt, Brace & Company, Inc., 1934.

A brilliant and readable book which indicates some of the more striking influences of large inventions on the course of history. An illustration is the interesting treatment of the influence of the invention of glass on society. The author is more successful in his historical treatment than in the analysis of future trends.

OGBURN, WILLIAM F., *The Social Effects of Aviation.* Boston: Houghton Mifflin Company, 1946.

An attempt to forecast the social effects of aircraft, with two chapters on methodology. For further discussion on the matters raised in this chapter, see the author's: *Machines and Tomorrow's World* (New York: Public Affairs Committee, 1938); *Social Change* (New York: The Viking Press, 1922); *You and Machines* (American Council on Education; Chicago: The University of Chicago Press, 1934).

OGBURN, WILLIAM F., (ed.), *Technology and International Relations.* Chicago: The University of Chicago Press, 1949.

The effects on international relations of the airplane, the atomic bomb, steam and steel, and the mass communication inventions.

OGBURN, WILLIAM F., and MEYER F. NIMKOFF, *Technology and the Changing Family.* Boston: Houghton Mifflin Company, 1955.

The second chapter in this book traces out in detail the processes whereby mechanical invention and scientific discovery effect social changes. In the succeeding chapters the impingement of these influences and processes on the family is shown.

NATIONAL RESOURCES COMMITTEE, *Technological Trends and National Policy.* Washington, D.C.: Government Printing Office, 1936.

This study attempts to chart the significant inventions of the future and makes some reference here and there to their possible social effects. The early chapters are a fruitful source of information on the effects of inventions.

STAMP, SIR JOSIAH, *The Science of Social Adjustment.* London: The Macmillan Company, 1937.

This book includes the address of Sir Josiah Stamp as President of the British Association for the Advancement of Science. Probably one of the best general expositions of the problem of the adaptation of society to the influence of science and technology.

25

Social Disorganization

In the autumn of 1956 the waters of the Jumna River in north India reached the flood stage. The monsoons had brought unusually heavy rainfall to this now treeless area. The dwellers along the banks fled their homes to near-by Delhi. There could be seen, crossing the boulevards to the parks, masses of cows, bullocks, buffalo, horses, donkeys, and goats. Refugees carrying bedding, bags, cooking utensils, furniture and food, sought open spaces where they could build fires, cook, feed the animals, and sleep. Soldiers were busy putting up tents; and the police were rerouting traffic, keeping back sightseers, many with cameras, and trying to bring some order out of disorder.

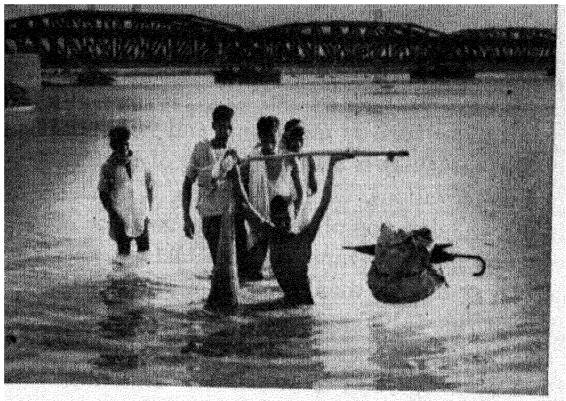
Such disorder has been frequent in the United States, where the flood waters of the Mississippi River rose above the streets of New Orleans or where the Ohio River flooded Evansville and the inhabitants rowed down the streets in boats. Similar scenes of fleeing inhabitants could be seen along the roads leading away from Paris when the German army entered the city in the Second World War.

The flood control engineers are now at work on our rivers, though it will take a long time to control the floods on all of them. As these lines are being written at the mid-century, the world is, uneasily, at peace. Yet, during the past century every generation of students has had to contend with the disorganization of wars or of business depressions. The younger readers of this book have no assurance that they will not be sorely beset by similar disturbances.

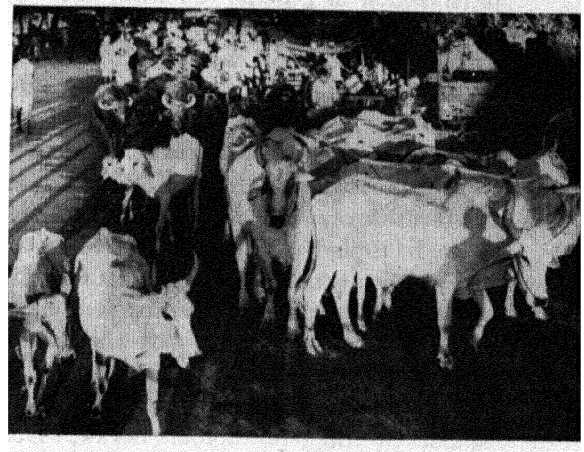
THE CONCEPT OF DISORGANIZATION

Examples of organization. An organization is an articulation of different parts with various functions to perform. The human body is a beautiful illustration of organization. There are organs for the intake of food and air and for the excretion of waste. The circulatory system feeds all cells of the body and the nervous system stimulates and controls the activity of the various parts and of the whole. Organs of sight, hearing, taste, and smell are so placed as to provide reaction and movement. The whole is in balance.

The life of a city is likewise excellently organized. In the hours before dawn, the food to be distributed begins its movement in trucks and milk wagons from central markets and terminals to retail distributors and to homes. The transportation system swings into operation in time to carry the workers to factories, stores, and offices. The amount of transportation available bears an approximate relation to the number of people seeking it. When the lunch hour arrives there are restaurants and eating places for all. The amount of food on hand is more or less what will be demanded and a certain balance is struck. The goods to be sold are









283 **Disorganization and Organization**

The waters of the Jumna River, overflowing the banks, force the disorganized refugees to flee their homes with their cattle and household goods, while teams of organized workers build up levees. (Copyright by Punjab Photo Service.)

on the shelves and the raw materials are in the factories. Each person knows his job and is there to do it. The whole is demobilized in an orderly manner from dusk to midnight. The organized life of a city goes on from day to day for thousands of people engaged in multitudinous tasks of great variety.

How a city may become disorganized was shown by the bombing attacks by airplanes on European cities during the latter part of the Second World War. An excellent description of how war may disorganize a city is given by Margaret Mitchell in an account of the capture of Atlanta, Georgia, in 1864.

From Leyden house down to Five Points, the street seethed with activity, the activity of an ant-hill just destroyed. Negroes were running up and down the street, panic in their faces; and on porches, white children sat crying untended. The street was crowded with army wagons and ambulances filled with wounded and carriages piled high with valises and pieces of furniture. Men on horseback dashed out of side streets pellmell down Peachtree. . . . Throngs of women were coming up from the direction of the railroad tracks carrying hams across their shoulders. Little children hurried by their sides, staggering under buckets of streaming molasses. . . . Lying in the pitiless sun, shoulder to shoulder, head to feet, were hundreds of wounded men, lining the tracks, the sidewalks, stretched out in endless rows under the car shed. . . . Everywhere, swarms of flies hovered over the men, crawling and buzzing in their faces. . . . The

smell of sweat, of blood, of unwashed bodies, of excrement rose up in waves of blistering heat. . . .[1]

Disorganization was almost complete with the loss of synchronization of smoothly working parts. In the confusion there was no balance in the division of labor.

What is social disorganization? In this chapter we shall be studying social disorganization in general. To study the various kinds of disorganization with which we as citizens must deal would require a separate book. The various kinds of disorganization are indeed the subject matter of most textbooks on social problems.

The disorganization caused by a flood or the invasion of a city in war may be so great as to be called a disaster. The word disorganization itself is a strong term. It means away from organization, as disorder means away from order. But there are not just two extremes, order and no order. There are degrees of orderliness. The great majority of cases of disorganization are not the severe types produced by floods or wars, but mild like that of a strike which disrupts production briefly or a traffic jam that merely lessens temporarily the efficiency of movement. The range of the phenomenon studied in this chapter is over a continuum from very slight disorganization to total disorganization.

To examine the concept of social disorganization further, we refer the reader to Chapter 16, where we discuss social organization. To recapitulate in a few sentences, we there showed that an organization is an orderly relationship of parts. But the significance of this orderly arrangement of parts lies in what it does. Thus a factory is an organization for the purpose of production. Its primary function relates to outside organizations such as merchants and railroads.

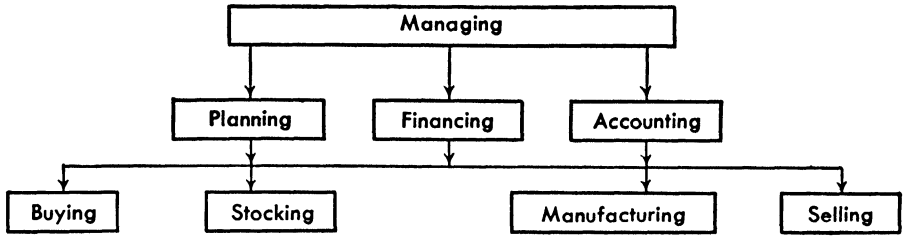
But a factory is also composed of internal suborganizations, as, for instance, a department of sales, one of accounting, and one of supply. Another function of a factory, as a social system, is then to maintain a balance among its suborganizations or parts. This equilibrium of parts means a synchronization or integration of functions. Thus buying supplies must be articulated with manufacturing and manufacturing must be coordinated with selling. Disorganization is a disturbance of the balance existing in the functioning of parts. The criterion of disorganization is function, what is done or not done. Thus a typewriter may write well or badly or not at all, because of an imbalance in the functioning of its parts as, for instance, in the ribbon or keys. Among several makes of typewriters, one may write the best, because of a better balance of parts, which in turn may rest upon materials or their shapes.

Disorganization does not always involve morals. When we say that one make of typewriter writes the best, this statement is not a moral evaluation. It simply denotes a technical performance in comparative terms. The technical performance of a social organization can be appraised without any moral evaluation, as we do in the case of a typewriter. Thus one factory is more efficient than another in the quantity or quality of the goods it produces.

But in society we are often not content in making only a relative comparison of performance. We often find it necessary to appraise a performance as morally good or bad. Thus when soldiers turn their backs and run in the face of enemy fire the performance is inefficient, but we also appraise it morally. The word "bad" may mean either evil or inefficient.

The distinction between the two meanings is important for methodology. Whether a function is technically efficient can often

[1] Margaret Mitchell, *Gone With the Wind* (New York: The Macmillan Company, 1936), pp. 358–361. Reprinted by permission of the Macmillan Company, publishers.



284 The Organization of the Functions in a Factory

The functioning of an organization depends upon the balance of the functions of its parts. If the sales department fails in its functioning due to a depression or competition, there is an imbalance; and the departments of supply, stockpiling, and manufacture are all affected. The maladjustment then requires a readjustment, setting a new balance. The maladjustment may be so severe as to lead to a disorganization ending in the failure of the business.

be determined objectively by measurement to the satisfaction of two persons who differ widely in their emotional subjective biases. The speed with which the earth rotates around the sun is acknowledged by atheist or religionist, by radical or conservative. In the case of a strike by labor, its efficiency may be acknowledged by radical or conservative; but morally it may be deemed good by radicals and bad by conservatives. There is no objection as such to judging acts morally. Morals are quite essential in social life. But in science it is difficult to measure degrees of morality or to get objective proof concerning moral values, although in a special group or at a particular time there may be 100-per-cent consensus that an act is immoral.

Also it is interesting that some organizational functioning may be proved highly efficient yet condemned as immoral. Thus a gang of youths may break into a store and steal from a merchant without being detected — an efficient performance without accompanying disorganization, yet immoral.

Also some of the disorganization discussed as social problems and called immoral may be the result of efficient functioning of an organization but disorganizing to society, as in crime, labor problems, and race relations. A border raid may be efficient but disorganizing to the community.

Social versus personal disorganization. We consider social disorganization as disorganization within customs, institutions, groups, communities, and societies. But social disorganization always involves persons, for institutions and customs are the behavior of persons and persons compose groups, communities, and societies. Disorganization occurs also in norms, which are standards of personal behavior. In disorganization, too, old roles may be of little guidance and persons may be required to play new roles. Indeed some social scientists [2] say social disorganization always brings personal disorganization, since a person is a social creation and his "self" a social product. In the case of family disorganization resulting in divorce, there is obviously some personal disorganization. But consider a strike which disorganizes industry. There is also some personal disorganization, but it is surely very slight in a typist working in the boss's office.

Personal disorganization is a term usually reserved for those more serious deviations dealt with in Chapter 12, concerning, for instance, neurotics, victims of some shock, or persons whose morale suffers from war, unemployment, or disgrace.

In dealing with social disorganization in

[2] See the writings of Charles H. Cooley and Ernest R. Mowrer.

this chapter, we shall treat the strained or disrupted connections within an organization or between organizations. Thus we can discuss the producing and marketing and banking organizations as disrupted by war without dealing with personal problems caused thereby. In some organizations where the parts that compose it are persons, as in the family, disorganization in the parts means personal disorganization, and maladjustment of persons one to another. We realize, of course, that the importance of organization and disorganization lies ultimately in their effect on people. Yet a phenomenon like the death rate can be treated statistically without personalizing it by case histories.

EQUILIBRIUM AND CHANGE

The relationship between the parts of a social organization reaches in time some degree of stability, unless the introduction of some important innovation produces a change which breaks the stability.

Whole societies as well as special organizations may become stationary, though probably none exists now. Societies that are changing the least are those with simple hunting cultures in isolated spots such as rain forests in tropical areas or in inaccessible polar regions. From descriptions of these cultures that have been changing very little, we can obtain a picture of stationary societies which is quite valuable, and can contrast life in them with life in our own rapidly changing society. This we shall do in the following paragraphs.

Contrasting characteristics of stationary and changing societies. There are certain characteristics of a stationary society that are different from those of a changing one.[3] For instance, in a stationary society parents know with much more certainty what sort of occupations and lives will be the lot of their sons and daughters and grandchildren than do parents in a changing society.

A stationary society is one where there is no notion of progress or of reform. These are great goals in a changing society. In a stationary society, the hopes of humanity center upon such interests as marriage and children, a good food supply, and a heavenly abode after death, rather than around improving living conditions here and now. Interest focuses on changing the characteristics of individuals as they grow up into men and women, rather than upon changing environment. The emphasis is on individual ethics rather than on social ethics.

Experimentation has long ceased in a stationary society. Trial and error have already occurred before the society became stationary, and the best practices have been agreed upon, that is, the best in view of existing equipment. The attitude is expressed by the remark, "we do it that way because it has always been done that way." In modern society something new is frequently occurring, and the attitude is, "there is always a better way." In a changing culture the dividing line of political opinion tends to be that between radicals and conservatives.

A stationary society favors the elders, who become wise by years of observation on conditions that do not change, while a changing society favors youth. The young workers who are equipped with the most recent and advanced techniques readily displace those who are older. It is interesting to note, too, that in the United States today the age of workers in the old occupations, such as blacksmithing, is much greater than in new occupations such as those concerned with electronics.

In a stationary society rules of behavior can be formulated successfully in great detail, because conditions do not change.

[3] W. F. Ogburn, "Stationary and Changing Societies," *American Journal of Sociology*, 42: 16–32, July 1936.

What to eat and what not to eat can be prescribed because the kind of food remains the same and no new knowledge will come in, let us say, about chemicals or vitamins. The conditions for marriage and divorce can be laid down with exactness for future generations. A stationary culture is one where there may not be just ten commandments but thousands of them. It is a culture of custom, of moral codes, of manners, of respect for the law.

On the contrary, when conditions are rapidly changing, a rule specifying how to behave for one period will not apply to the next, for conditions will be different. "Early to bed and early to rise" is an essential maxim, for instance, when there are animals to be fed. The wisdom of the adage is less apparent when there has been a change from farming to intellectual work in cities which may be accomplished best in the late evening. Morals that will carry through changing conditions must of necessity be very general, such as "the greatest good to the greatest number," a maxim too general in fact to be of any help to a nonintellectual person. Without the guidance of specific rules, the individual is thrown back on an analysis of consequences. Thus, moral codes, and laws also, tend to lose the respect they command in more nearly stationary eras.[4] The dominance of the folkways and mores so well described by Summer is greatest in societies, unlike our own, that are not changing or are changing very slowly.[5] Social change alters greatly the nature of society from what it is when conditions are stable.

The integrated culture pattern of a stationary society. In the preceding chapter the influence of social change in general on different customs and institutions was noted. There remains to be discussed the effect of social change upon the total culture, that is, upon the pattern made by the different parts of culture when fitted together as they always are. Thus the pattern of culture in colonial America was quite different from what it is under modern industrialism. There the pattern was one of small governmental units, and little industry outside the home. The family was very important and together with the village and the church ruled men's behavior. Now the parts fit into a different design. Industry and government have grown; the village is less conspicuous; the family governs a smaller area; the church is more restricted in its range of influence.

Adaptation of new culture trait to old patterns by trial-and-error experimentation. Before proceeding to discuss the pattern of cultural relationships, however, it is desirable to make a few observations on the method whereby any new element is assimilated into the culture irrespective of whether it results in disorganization or improvement. Usually a new element is experimented with. Individuals react to it in different ways. As a simple illustration, the toothbrush may be cited. The toothbrush was introduced into modern society so recently that observations may be made upon its adoption. At first teachers in nurseries and schools taught that the movement of the brush in use should be horizontal. Later, vertical or rotary movements were suggested. There were combinations of movements for various parts of the oral anatomy. Moreover, not every individual uses the brush in the same way. Since the variety of methods of using a toothbrush runs into the scores, various types of toothbrushes were made to facilitate the different methods. There have, indeed, been over 700 United States patents granted on the

[4] E. R. Wembridge, *Life Among the Lowbrows* (Boston: Houghton Mifflin Company, 1931), p. 247.

[5] How rapid cultural change produces a condition of *anomie* ("normlessness"), has been effectively shown by the French sociologist, Émile Durkheim, in *Suicide,* tr. by J. A. Spaulding and G. Simpson (Glencoe, Ill.: The Free Press, 1951).

toothbrush. Clearly, the period of adoption of the toothbrush has been one of trial and error. Eventually, the less desirable ways will become obsolete. One or more preferred ways and types will be chosen, and there will be no further experimenting, unless there is some new discovery.

Somewhat the same procedure occurs whenever an important culture trait is adopted, whether it be the cultivation of maize, or a new religion. Such trait complexes are experimented with, though perhaps not so much as in the case of a simple material device like the toothbrush. A large culture complex becomes modified as it is adjusted to the other parts of the culture. The adult education movement, as it is adopted in different countries, must be modified to fit the existing educational and occupational systems. In Scandinavia it is being adopted in a way different from that in the United States. In Sweden there is less high-school education and more cooperative activity than here. Hence cooperatives there furnish adults some of the subjects taught in high schools here. Thus a new unit has been introduced into the educational system changing the pattern and bringing a new equilibrium.

There is, however, a period of trial and error, with modification to some extent of both the culture traits adopted and the culture traits to which they must be adjusted. It takes some time to make the adjustment. In our own culture, for instance, street and road conditions have not yet become adequately adapted to the automobile; and some disorganization or maladjustment has resulted. Nor has the family or church made a wholly satisfactory adjustment to the automobile. In the course of time an adjustment will have been made, only to have some new innovation cause a new modification.

The trial and error method of adapting a new culture trait to the culture pattern seems to lead generally to what is considered a progressively better adjustment between the parts of the system. For instance, in adjusting compensation to those injured by dangerous machinery in the United States, the first attempt was to employ the old common law on liability; the second attempt was to develop new laws on employers' liability; the third trial yielded workmen's compensation insurance, an improvement on the other procedures; and now workmen's compensation is being improved.

In an old society which is receiving few new elements of culture, and hence is nearly stationary, the experiments with formerly new traits may be assumed to have been carried through and the best choice made. Such an old stationary society was described and contrasted with a changing society in a preceding paragraph. The "best" adjustments to the existing culture traits have been worked out. In a long established culture, then, it is a fair assumption that there is a more harmonious adjustment of the different parts of the culture than in a society where there are newly adopted parts of culture.

The change occurring in a society or organization when a new element is introduced is only appreciable when the new element is a significant innovation, invention, or culture trait. A minor improvement in, say, an invention (though sometimes improvements are called minor inventions) is not of enough importance to produce much change. An important new trait is a force which is likely to disturb the pattern of balance already worked out. Changing societies are then likely to be societies with social problems and maladjustments even though the changes are desirable. Urban society may be desirable, but it has not been with us long enough for the family, the church, and other institutions to achieve the best possible adjustment to it.

The integrated culture pattern of a stationary society exemplified. An instruc-

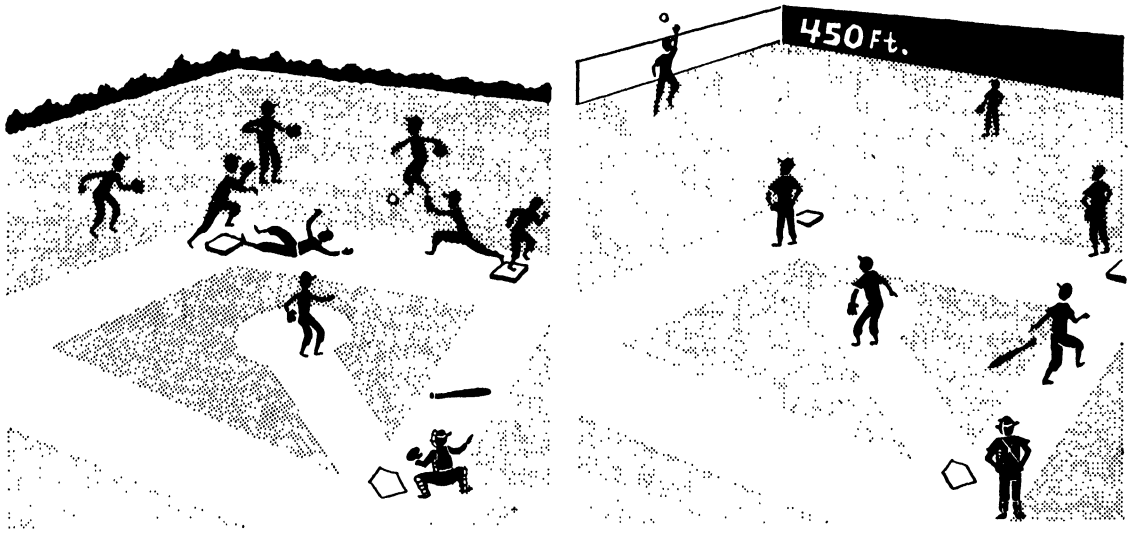
tive illustration of a stable society is afforded by the natives of Hawaii in the long period of their history before the coming of the white man.[6] The island was perhaps first inhabited about 500 A.D., and for five hundred years thereafter it enjoyed undisturbed isolation from the rest of the world, for not until the eleventh and twelfth centuries was the land invaded again by Polynesians. Five hundred more years elapsed before the first white men arrived. For approximately a thousand years the island culture was almost completely free from outside influence and disturbance, with the result that a particularly satisfactory cultural adaptation was achieved by the natives. The island resources were limited, but not unduly so; hence they permitted an adjustment without struggle. The native diet of pork, coconut, breadfruit, bananas, and sweet potatoes was adequate and well balanced. The natives were splendid of physique, their good health being the subject of frequent comment by observers. The two-thousand-mile sea barrier served as a defense against microbes hostile to man elsewhere; cholera ravaged Europe and Asia, but was inert by the time it reached the island. The long period of isolation allowed the natives to establish immunity to the diseases they already had when they first came to the island. As a result, the population grew to between 300,000 and 400,000, where the number was stabilized and kept in check by infanticide, abortion, and intense warfare. The picture of Hawaiian society before the advent of the white man is, then, one of balance and adjustment.

This harmonious situation was disturbed by the arrival of Captain Cook and his sailors in 1778. The long-established equilibrium was upset and a period of disorganization initiated. The natives were ravaged by the diseases of the white man, particularly by the venereal diseases. Alcohol was a negative influence, as was also the introduction of firearms, for the latter made warfare more deadly and played a prominent part in bringing about the decrease in the number of the natives. Within a century and a half, the native population was reduced to but a tenth of what it had been before the white man came. Further cultural innovations likewise proved disturbing, notably the substitution of an economy based on trade for the existing subsistence economy. The effect of the impact of white culture upon that of these Polynesians was, then, to upset the existing balance and set revolutionary and disorganizing changes in motion.

Is the prevailing organization the most effective? This question appears foolish to a young generation whose motto might well be, "There is always a better way." But you, readers, are living in an age of change when innovations come fast and when some improvement is nearly always possible in any organization. The question only makes sense when applied to a nearly stationary society or a nearly stationary part of a changing society, after the members have had plenty of time to experiment by trial and error with different arrangements and to make minor improvements in them, very much as the toothbrush discussed in a preceding paragraph was experimented with.

If the reader will turn back to Chapter 3 and reread the sections on the Eskimo, he will see how well the parts of the Eskimo culture are adjusted to each other. This adjustment has been frequently noted with regard to their material culture. But the adjustment is also efficient with regard to their social organization. The family is effectively related to the community. Its flexibility is suited to the custom of migrating and to the long periods of hunting afar. The Eskimo dance is well suited to a sparsity of forms of recreation; and their system of justice, which

[6] Andrew W. Lind, *An Island Community* (Chicago: The University of Chicago Press, 1938), Chapter 5.



BEFORE

- *There was more placing of hits for short distances.*
- *Base-stealing was more common.*
- *There were more double plays.*
- *Bunting was more common.*
- *The players played more often close in.*

AFTER

- *There were more home runs.*
- *There were more long hits.*
- *Strikeouts of heavy hitters were more frequent.*
- *Pitchers had to work harder.*
- *More batters were forced to dodge balls thrown close to them.*
- *Premium on the throwing arm of outfielders.*

285 A Change Without Disorganization

In the first part of the twentieth century the ball used in the game of baseball was changed in the center to make a livelier ball and the surface was kept whiter and smoother and drier. There was no other significant modification of the game of baseball; so the changes recorded above were due to the changes in the ball. Any disorganization was so slight as to be negligible. Yet the interrelationship of the functioning of the parts was changed radically in several different ways.

is lenient, is fitted to the maintenance of population. Their elaborate manners and singing duels serve the purpose of minimizing violent quarreling and maximizing peaceful coexistence.

A casual visitor to a nearly stationary culture will have many suggestions for improvement. These suggestions will often be good; but they nearly always call for some new invention, mechanical or social. Thus the agriculture of Pueblo Indians could be improved with irrigation, fertilizer, insecticide, and hybrid seeds, all new inventions to the Pueblo Indians. The claim for efficiency in a stationary society is based on existing culture traits, without the addition of new ones. Given the cultural traits which they have had for a long time, stationary societies are likely to have developed the most efficient integration of their cultural traits.

This statement is a theory, rather than demonstrated knowledge, since not all nearly stationary societies have been studied to test this theory.

However, anthropologists who have learned the language of such peoples and are familiar with their value systems and culture patterns generally report favorably on the adjustment of their culture traits one with another.[7] Missionaries who have lived a long time with a people make the same report. Missionaries do not try to effect an improvement except by the introduction of some innovation such as religion or a hospital. When the isolation of nearly stationary societies is broken by transportation, a flood of innovations is possible. The rapid development of many underdeveloped countries is being made possible by the technical aid program of the United States, implemented by techniques, loans, and gifts.

Improvements may overshadow disturbances. Reformers initiating improvements focus on the improvement rather than on any disorganization that may result because the old equilibrium is upset. Thus malaria may be abolished by the introduction of new discoveries and this certainly seems desirable. But, when praising such an achievement, nothing is said of the disturbed balance of the birth rate and the death rate. The lowered death rate may lead to an increase in population which presses on the food supply and lowers the standard of living.

For many improvements, the dislocation of the old equilibrium is minor and brief, while the new equilibrium with the new trait is a more effective one. Thus the introduction of a 4-H Club, a YMCA, or a Rotary Club appears as an effective addition to a community, with very little disturbance of the existing pattern of associations and clubs.

Some improvements appear to be wholly desirable because they help to restore a balance that has already been disturbed. The growth of cities with urban banks and other urban economic institutions has disturbed the financing of agriculture as it existed before there were many cities. Thus cooperative rural credit institutions help to restore a financial balance.

However, it is superficial observation not to look for some disorganization, however slight, when an improvement is made. For instance, when Burma and Ceylon won their independence from Britain, the resulting freedom from imperialism was hailed. Yet the tension between the freed local groups within these countries increased in competing struggles among them and led to open violence in Burma. It was the researches of the Hammonds as published in their *The Village Laborer* which showed the disorganization that came with the introduction of factories. F. H. Giddings used to call this phenomenon "the costs of progress."

Unequal Rates of Change in a Dynamic Society

A stationary culture that begins to change does not experience the same degree of change in all its parts at the same time. The introduction of the gun and the horse among the Indians changed their method of procuring food and their method of warfare,[8] but among most tribes the religion was not so soon affected by missionaries from the whites. Neither were changes so rapid in the other social institutions.

In the parts of our own culture, the degrees of change are unequal. Technological changes in chemistry and electricity are just now very rapid, more so than changes in the production of power and in the construction industries.[9] However, when industrial power

[7] Edward Sapir, "Culture: Genuine and Spurious," *American Journal of Sociology,* 29: 401–429, January 1924.

[8] Clark Wissler, "The Influence of the Horse on the Development of Plains Culture," *American Anthropologist,* 16: 1–25, 1914.

[9] National Resources Committee, *Technological Trends and National Policy* (Washington, D.C.: Government Printing Office, 1937).

from the fissioned nucleus of the atom or from the fusion of nuclei of the lighter elements becomes practicable, there may be many changes in power production. Laws tend to change rather slowly, while the courts by their use of precedent in deciding cases make the laws even more resistant to change. Religious creeds also resist change, at times rather successfully. There has been little recent change in musical instruments, particularly the violin. Industrial organization, management, and labor are changing rather rapidly. The parts of civilization move forward or backward, then, at very different speeds.[10] Indeed, it would be difficult theoretically to conceive of a culture where the different parts all changed at the same rate.

If the different parts of society were disparate, quite unrelated to one another, there would be no special concern with the varying rates of speed of the different parts. For instance, grand opera is not very closely related to the mechanization of the cotton culture. A change can take place in either without affecting the other very much. On the other hand, the rearing of children is closely related to the employment of women in industry. A change in one will effect a change in the other. If, then, the parts of society are not wholly separated but closely correlated, the unequal rates of change are of great importance.

If one part is changing rapidly and a correlated part is changing slowly, a strain is very likely to be created at once between the two unequally moving parts. This would certainly be the case if they had been previously in a harmonious balance. For instance, there is a certain balance between the animal and human labor in cultivating and picking cotton. If the animal power is replaced by the tractor and the human by the mechanical cotton picker, the strain will show in the unemployment among the farm laborers.[11] The strain will also show in the adjustment to the size of farms, which will have to be made larger.

The significance of the integration of cultural patterns. The seriousness of the strain or the disorganization produced by unequal rates of change in society depends upon the closeness of integration of the different parts. If the parts of society were as closely integrated as the parts of a clock, the situation would be very serious. If the various wheels of a clock were revolving at unequal speeds, the clock would cease to function. Integration in the superorganic is less close and more flexible, but there is some degree of integration, as is apparent from the discussion in the chapter on the social effects of innovation.

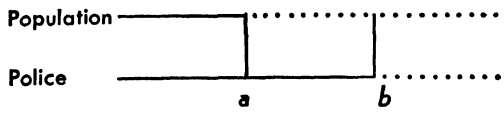
The cultural lag.[12] The strain that exists between two correlated parts of culture which change at unequal rates of speed may be interpreted as a lag in the part that is changing at the slowest rate, for the one lags behind the other. For instance, cities with increasing population have fewer police per 10,000 inhabitants than cities with decreasing populations.[13] The growing cities do not expand their police force fast enough; the decreasing cities do not reduce theirs soon enough. The change in the number of police lags behind the change in the population. This relationship is expressed diagrammatically in Figure 286. The population of a city changes at point *a*, but the number of police does not change until sometime later when point *b* is reached. Before point *a* occurs, a more suitable number of police exists for the population, but

[10] "Committee Findings," *Recent Social Trends* (New York: McGraw-Hill Book Company, Inc., 1933).

[11] Roman L. Horne and Eugene G. McKibben, *Mechanical Cotton Picker* (Philadelphia: Works Progress Administration, National Research Project, August 1937).

[12] W. F. Ogburn, *Social Change* (New York: The Viking Press, 1922), Part IV.

[13] W. F. Ogburn, *Social Characteristics of Cities* (Chicago: The International City Managers' Association, 1937).



286 **Schematic Diagram of the Cultural Lag**

between points *a* and *b* there are fewer or more police in relation to the population; while after point *b* is reached the number of police is changed to be in harmony with the change in population. To be sure, the population may not change very sharply at point *a* and the adaptation of the police to population may be more continuous.

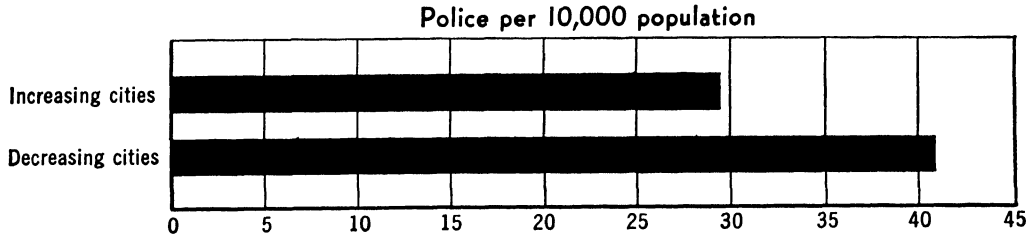
While most cities do not have an abrupt change in population, there are many illustrations of a sudden change. For instance, immigrants change their residence from Europe to the United States abruptly, within a week's time. They change their language and customs, too, but these changes come gradually. Thus the time of the changes in the two variables at *a* and *b* can sometimes be located sharply but at other times the period can only be stated in a term of years. For instance, the immigrant learns English, let us say, between a year and two years after coming to America. If he arrives as an adult, he probably never learns it well, that is, without an accent or without localisms. The exact date at which he learns the language can hardly be located as readily as the day he landed.

The degree of adjustment between the two variables before, between, and after the dates of change is not always easy to prove.[14] In the foregoing illustration, it is not difficult to show that on the average a certain ratio of police to population is desired by the city, although there are probably never enough police. The desired number of police is determined only after a preference is expressed based on the comparative costs of other things in terms of the taxpayer's money, as for instance, city hospitals. There are objective criteria in dollars and in crimes. Furthermore, a large city needs no different ratio of police to population than does a metropolis. It has been shown that there is no correlation between the rate of crime in cities and the rate of growth, when the police per 10,000 population is held constant.[15]

It is not difficult to reach a conclusion

[14] J. W. Woodward, "A New Classification of Culture and a Restatement of the Cultural Lag Theory," *American Sociological Review*, 1: 89–102, February 1936.

[15] W. F. Ogburn, "Factors in the Variation of Crime Among Cities," *American Statistical Association Journal*, 30: 12–34, March 1935.



287 **Changes in Population and the Lagging Number of Police**

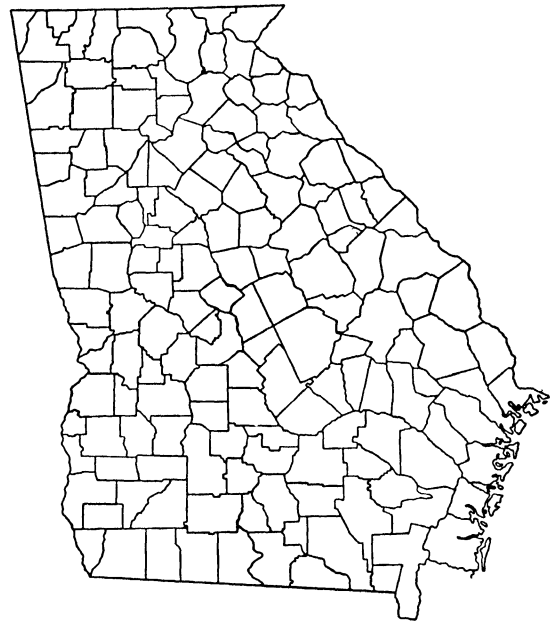
Population changes in cities occur prior to the changes in the number of police made necessary by the shifts in population. There is thus a lag or delay in changing the number of police. Where the population has grown and not enough police have been added, there is presumably a maladjustment. So also when a city loses population and the police are not retired fast enough from the payroll, there would seem to be a maladjustment in the city's finances.

about whether the degree of adjustment between dates *a* and *b* on the diagram is less than before *a* or after *b*. The maladjustment between the number of police and the number of inhabitants, after the number of inhabitants has changed and the number of police has not (as shown between points *a* and *b* in Figure 286) as evidenced not only in crime rates and in traffic violations, but also in municipal expenditures for other needs such as hospitals. For these criteria, objective measures in terms of efficiency could be had if there were time, money, and personnel to make the computations. On the basis of such knowledge, the citizens could choose for themselves the ratio of police to population that they desire. The average ratio in a number of cities whose population is neither increasing nor decreasing is probably pretty close to the number desired by the citizens, taking all the above-mentioned choices into consideration.

In a similar manner, the more efficient adjustment could be shown (after point *b* in the figure) when the number of police has been increased or decreased in accordance with the population increase or decrease.

The maladjustments due to cultural lag are often not so much disorganization as inefficient organization. Thus the very large number of very small counties in the state of Georgia as shown in Figure 288, more suitable to the horse and buggy days than to the automobile age, can hardly be called disorganization. It indicates, rather, less efficient organization for most county activities than there would be if there were fewer and larger counties.

The concept "lag" suggests action. The word "lag" implies that the proper course of action is to catch up the lag in the variable that has not changed or that is changing more slowly, so that it will be in better adjustment with the variable that has changed. The number of police should be changed to be in proper ratio to the population. Theoretically the course of action might be to reverse the change in the first variable and bring the adjustment back to where it was before point *a* in Figure 286 was reached. Practically, this course of action is seldom possible. It is not very practicable to force the inhabitants of a city to depart and live elsewhere until the proper ratio with the number of police is attained. Nor can fast-moving, dangerous machinery be abandoned to bring back the days of small hand tools when accidents were fewer.



288 County Map of Georgia

There are 159 counties in Georgia, most of which were laid out in the days of the horse and buggy. These counties are very small, averaging about twenty miles across (a half hour's ride on a good automobile road). A person can now ride to the capital of the state almost as fast as he could at one time ride to the county seat. Modern transportation makes feasible a wider base for governmental activity. Furthermore, the costs of county government are high, and many counties are unable to furnish the needed social services. The state might well be served with only 10 counties, instead of 159. The small size of counties has lagged behind an advancing transportation which has reduced the size of the state in terms of travel time.

Since the change has already taken place in the first variable, adjustments to the new conditions must be made in the second variable. If the change in the variable precipitating changes in other variables could be foreseen and prevented, then the maladjustment could be avoided. But such a course of action requires a high degree of planning and control. The existence and the seriousness of the lags due to prior changes in science is admitted when it is suggested that a moratorium on mechanical invention be declared until the lags of society have caught up [16]; but so far the suggestion has not been acted upon.

Advancing technology and lagging social institutions. The suggestion of a moratorium on natural science is evidence of the recognition that technology often changes first, to be followed later by its social effects. Such was the conclusion of the preceding chapter, where some theoretical argument was furnished to support this very common observation. It is concluded therefore that the many and frequent technological innovations of our modern age, by occurring prior to the social changes they precipitate, are the causes of many cultural lags in society.[17]

The situation may be expressed in another way by saying that as each new invention makes its way into the culture, society attempts various experiments with the new element to improve it and to find the best adaptation to it. But these experiments take time. It may be asked why there is a delay. Does not the first use of an invention represent an immediate adaptation? Yes, but the immediate use of an invention does not represent the many adjustments that must be made to it. There are derivative effects. For instance, an automobile is made to ride in, and when one rides in it there is an adjustment. But riding in an automobile does not represent the adjustments that have to be made to it by railroads, factories, highways, police, vacationists, hotels, law courts, state governments, churches, schools, farmers, hamlets, marketing agencies, migratory laborers, health departments, and dozens of other social agencies. These do not adjust rapidly enough to the automobile. Take, for instance, the first illustration in the preceding list, the railroads. They did not make their adjustments to the automobile soon enough, on the financial side, in acquiring new equipment and in adjusting their short runs. That the lag was costly and led to some disorganization is evidenced by the large number of bankruptcies among railroad companies. The adjustment of a culture to a new invention involves much more than its immediate use.

Some of the significant technological developments and inventions that are producing cultural lags in contemporary society are the telephone, automobile, radio, moving picture, power-driven agricultural machines, printing, photography, alloys, electric transmission lines, electrical goods, welding, chemical uses of cellulose, coal tar products, chemistry of foods, the airplane, air-conditioning, artificial lighting, contraceptives, coin-in-slot devices, and television. These are producing a terrific impact on society, its social institutions, its customs, and its philosophies. The result is an enormous accumulation of social lags.

One possible lag in particular may be mentioned. It is the lag in adjusting to the atomic bomb. The adjustment may mean not using it. But if so, adequate international organization must be set up to prevent its use, or the adjustment might be to fight no more wars. Should the bomb be used in future wars, then possible adjustments would be (1) military defense of cities against air

[16] Sir Josiah Stamp, *The Science of Social Adjustment* (London: The Macmillan Company, 1937).

[17] Wilson D. Wallis, *An Introduction to Sociology* (New York: Alfred A. Knopf, Inc., 1927), Chapter 34.

attack, a defense which will be very difficult if not impossible to perfect; or (2) the dispersal of population outward from the cities, which is almost impossible to carry out thoroughly. The evidence since Hiroshima and since the stockpiling of fusion bombs has indicated that a lag in adjustment occurred which may be very tragic indeed.

The fact that technology is at present so powerful a cause of cultural lags, and consequent social disorganization, does not deny that other variables such as social inventions or population changes are creating lags also. In fact, the lag of social changes behind technological progress is simply a special case of the general phenomenon of unequal rates of change of the correlated parts of culture.

Changes in nature as well as in inventions cause disorganization. It needs to be noted at this point, however, that there are causes of social disorganization other than the impact of one cultural change on other parts of culture. As was observed in the case of the floods, a changing natural environment can have a telling effect upon man and culture. Disease, for instance, may work havoc with the functioning of whole groups and communities. It is said that when the Black Death visited England in 1348, it destroyed between a third and a half of the population in a little over a year. In Caramania and Caesarea the entire population was said to have been wiped out.[18] In the same way, social life is disrupted by earthquakes, volcanic eruptions, floods, and the various other catastrophic phenomena of nature. The extent of the social disorganization depends, of course, on the ability of the existing culture to cope with these natural phenomena. The disasters caused by the bombing of cities in war are similar to some caused by nature. We are studying and learning how to mitigate the effects of such catastrophes. Much has been learned from the experience of the Red Cross.[19] We now have some knowledge with which to control or check epidemics, to build earthquake-proof houses, and to dam rivers against floods. The force of geographic factors in producing social disorganization depends, then, on the state of the local culture. These factors would be far more important in causing social disturbances in preliterate society and in earlier times than in modern society. Modern transportation has banished famine from many lands. However, recent experiences in the United States with flood, dust storms, and drought suggest that these geographic factors are not to be slighted.

Some Examples of the Effect of Unequal Rates of Change

It may be helpful to present in the remaining paragraphs a number of examples of social disorganization affected by unequal rates of cultural change.

Unemployment. One of the most serious of modern contemporary social problems, unemployment, is evidence of social disorganization, not so much because to be unemployed and without money is a tragedy though it certainly is, but because large-scale unemployment reveals that the organizational adjustment between population and industry is not a good one. One type of unemployment today results clearly from unequal rates of change. New inventions take jobs away from men before new jobs are created. Also, much unemployment is caused by business depressions, which arise because production moves faster than purchasing power. Unemployment, then, represents changes in business conditions which come more quickly than changes in population.

Business depression. Depression itself is a major expression of social disorganization. All business life is affected, and so

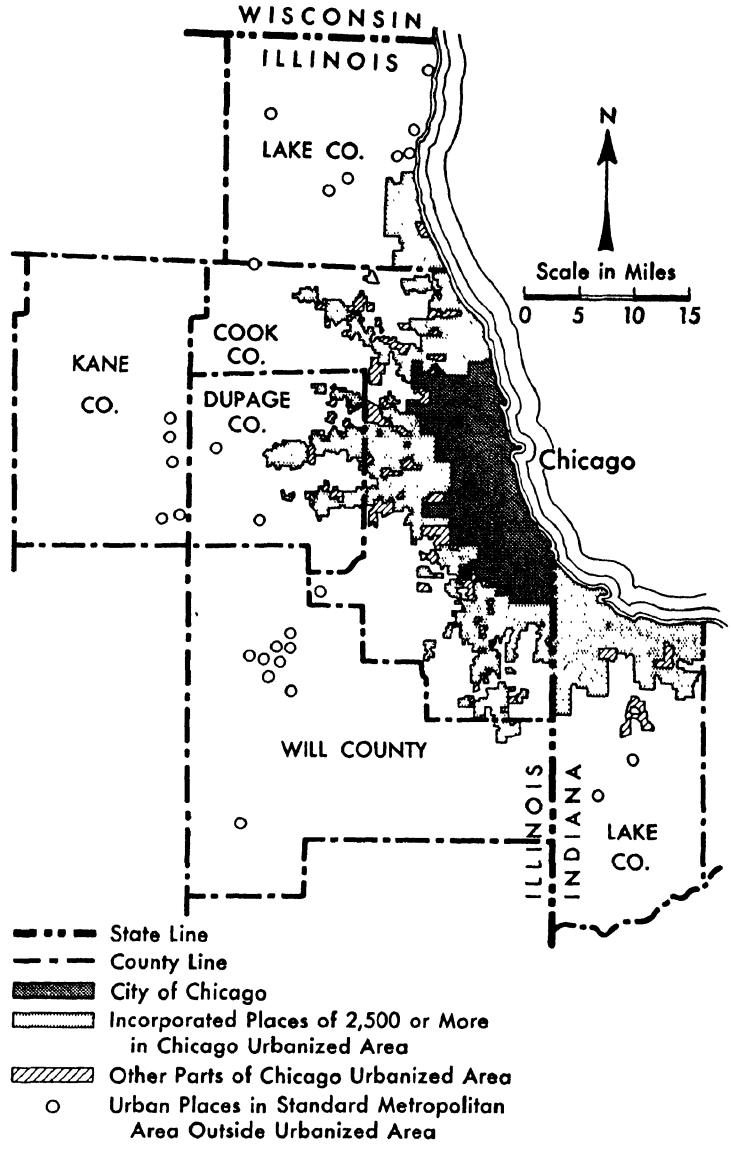
[18] J. F. K. Hecker, *Epidemics of the Middle Ages* (London: G. Woodfall and Son, 1844), p. 23.

[19] See also the publications of the Committee on Disaster Studies, National Research Council.

289 Population and Governments in Chicagoland, 1950

The expanding population of the area has produced an economic integration, but not yet a political one. In Cook County, in which the City of Chicago is located, there are more than 400 distinct political units. There are too many local governments and not enough local government. The local government is inefficient in that the costs of government are high, and there are inadequate social services. Governmental changes have lagged behind economic changes with accompanying maladjustments.

The lightly shaded area adjoining the darker shaded area of Chicago has many different governments for the various suburbs, while Cook County, which is comprised largely of Chicago, has 600 governmental units with the power to levy taxes. The circles represent outlying urban places. The counties, of course, have separate governments. (Map from Chicago Plan Commission.)



cial and individual life as well, as in the postponement of marriages, the increase in suicides, and the reduction in the social services. What causes the business depression is not known with exactness, but it is generally agreed that it is due to a failure of buyers to purchase the goods produced at the prices quoted. Production grows faster than purchasing power. If the two forces were better synchronized, the number and intensity of depressions would be greatly reduced.

Poverty. Want is often listed in books on social disorganization or social problems, sometimes on the theory that society does not function well if the inhabitants are poor or destitute. But that poverty is in part caused by unequal rates of change was argued by no less a figure than Malthus, who based his explanation on the fact that population increases according to an exponential law which is inevitably faster than the increase of the food supply, which grows by arith-

metic progression. This explanation is applicable only to non-commercial farmers who have no practice of birth control. There are much fuller explanations of poverty, but many may be traced back to rates of increase of population. Variations in income due to fluctuations in business, and the very uneven distribution of income, are also causes of poverty.

Ill health. Poor health is sometimes considered in relation to social disorganization. It is true that if many persons are sick, the work of the community does not go on so smoothly. As was pointed out above, ill health for the most part represents the failure of individuals to adjust to environment, and occurs in stationary as well as in changing societies. But even so, changes in civilization do increase or decrease disabilities. Most of the early plagues can be traced to the crowded, unsanitary conditions in the cities; and even in our own time new industrial activities have been attended by new occupational diseases. Automobiles cause numerous accidents and fatalities. On the other hand, chemical and physiological discoveries are reducing the incidence of certain diseases.

Crime. This major manifestation of social disorganization is perhaps due more to the failure of original nature to adapt to culture than to unequal rates of change. The aggressive selfish traits which were of survival value when man's ancestors lived in trees in the wild state, operate very badly in a world of property; and crimes of theft, robbery, larceny, and forgery result. Still, this adjustment between original nature and culture is affected by changing situations. For instance, the majority of crimes today occur in cities. Large aggregations of population due to the power inventions have come into existence faster than have moral and physical agencies of control. It will be very difficult ever to bring the agencies of control of crime to the point where there is as little crime in cities as in small rural communities. The greatest number of crimes today are crimes against property, which has increased most rapidly in modern civilization.

Race conflict. Sociological books on contemporary social problems usually deal also with race conflict. The difficulties races have in living together or in dealing with one another vary according to the situation and the peoples concerned. It may be noted at once that, in almost all cases, the contacts which bring out the friction are due to the transportation inventions which have thrown the races into close contact. Technology changes first, and the adaptation of the races to these changes occurs much later. However, the role which transportation plays in forcing races into relations with each other is not a particularly helpful point in dealing with the problem. Other analyses may be more useful in affecting improvements, such as those dealing with the factors of ignorance, competition, and discrimination. Race prejudice is a matter of attitudes, which are often thought to be amenable to education; and the usual approach to the question concerns changing attitudes. The inventional factors, like modern transportation, that bring these race prejudices to the fore are not appreciated because they are not easily changed and hence have little to do with improved adjustment.

Family disorganization. There can be some family disorganization in a stationary culture of a primitive people. A lazy husband may not provide enough food and clothing for his family, or the affectional bond between mates may be weakened or broken by the entrance of another contender. These problems are due to the difficulties of original nature in making a proper adjustment to the cultural requirements. In modern times this difficulty of adapting our biological nature is in evidence, but there is also family disorganization due to unequal rates of change in different parts of the social



The Society for the Preservation of New England Antiquities

Merrim from Monkmeyer



290 Decreased Organization in the Family Caused by Unequal Rates of Change

When the home was a small factory with the members of the family and relatives as workers, the family was large and highly organized. When the factory took production away from the home, the organization of the family was changed, with the children going to school and the husband working away from home. The functions of the wife as worker were reduced. An increase in disorganization followed, with divorce becoming more prevalent. The weakened tie of economic partnership in marriage may not be fully offset by the strengthening of other ties, such as the affectional or recreational.

heritage. Prior to power machinery, the agricultural family was bound together not only by affectional functions but also by others, such as the protective, educational, recreational, religious, and especially the economic. Members tied together so closely by these bonds would not become disunited easily; divorce and desertion were relatively rare. But with the transfer of the economic functions to the factory and store, the others were also transferred in large part away from the family, excepting the affectional one and the education of little children. Family members are now held together largely by one tie only, the affectional one, which seems to be rather brittle. The obvious result is more divorce and more separation of mates. The new economic situation has changed the family, but adjustments in family ethics, education, and status have lagged, with resulting social maladjustments.

Labor problems. One final illustration from the field of sociology may be cited. Labor problems of modern industrial life are due to unequal rates of change in labor organization on the one hand, and in the organization of management and technology on the other. Until the past three decades, since labor organization had grown less rapidly, the swifter organization of industry had resulted in great pools of power. The maladjustment was largely on the part of labor. Such is still the case in many industries.

On the other hand, labor organizations have multiplied since the late 1930's and the war years, so that in some sections of economic life, particularly where small businesses operate, labor organization has outstripped the organization of industry. Such is the case in various garment trades and in some small towns. A stable balance would reduce these tensions evidenced in strikes, lockouts, friction in the plant, etc.

It is thus clear that many of our most important social problems can be traced to the unequal advance of different parts of our civilization. Sometimes this explanation is very useful in suggesting aspects of the problem that are subject to remedy, as in the case of family disorganization and the position of women. In other cases, for instance that of race conflict, unequal rates of change and lags are a part of the explanation but do not suggest remedies. However, the theory is valuable in showing that the foundation of much contemporary social disorganization lies in the irregular changes of our civilization.

SUMMARY

When the usual or normal functions of a mechanism are interrupted or impaired, it is said to be disorganized. Social disorganization refers to the disruption of the functions of some social unit, such as a group, an institution, or a community. The appraisal of disorganization is in terms of the way the mechanism works; hence the existence of disorganization can be determined more or less objectively. On the contrary, quite subjective are such considerations as whether or not the organization itself is socially desirable and whether or not its disorganization is a bad thing. Matters such as these are determined by the consensus of group opinion.

This chapter has been devoted to considering the basic causes of social disorganization. One was shown to be the maladjustment of man and culture to the natural environment, particularly certain extraordinary manifestations such as epidemics, floods, and earthquakes. Another cause, developed in a previous chapter, is the lack of adjustment of man's inherited nature to the demands of group life and culture. The third major cause, treated fully in this chapter, was seen to be the stress caused in correlated parts of culture when they change at unequal rates of speed. Social disorganization thus results from conflict between the basic factors in

human experience; that is, between geographical influences and culture, between heredity and culture, and between the various parts of culture.

The last mentioned cause of social disorganization has been stressed in this chapter because of its great significance for contemporary society. As was shown, the geographic cause is more prominent in the case of cultures less advanced than our own which are lacking in adequate controls. The biological factor, it may be observed, may be poorly adjusted to culture even on the lower levels. Indeed, in the chapter on "Socialization and Social Deviation," the difficulty of determining whether mental disorders are more common in modern society than in preliterate society was pointed out. In any case there are individuals who find it hard to adjust to the requirements of the group even on the primitive levels. The social disorganization produced by unequal rates of cultural change, however, is peculiarly a phenomenon of dynamic, modern society. In a stationary society, there is a more harmonious adjustment of the parts of culture, an adjustment which has been worked out over a long period of time.

When culture begins to change, the modifications do not occur evenly in all parts of the social heritage. Some parts change faster than others. When the different parts are interrelated, the varying rates of change produce a strain between the unequally moving parts. The part that is moving at the slowest rate of speed constitutes the culture lag. Since the other part of culture has already changed, as a rule the most practicable method of effecting a better integration between the two parts is to make some adjustment in the part that is lagging. Modern technology is changing at a rapid rate and creating important social changes, with which our social institutions have not yet caught up. Analysis of important modern social problems, such as unemployment, poverty, and family disorganization, shows that much of our contemporary social disorganization issues from the irregular changes of our culture.

QUESTIONS FOR DISCUSSION

1. What is social disorganization? When does it involve moral judgments?
2. What is the relationship between social and personal disorganization?
3. Is the prevailing social organization the most effective?
4. Why is it "superficial observation not to look for some disorganization, however slight, when an innovation is made" in a social system?
5. How does "inefficient organization" differ from "disorganization"?
6. What is a "nearly stationary society"?
7. What is the theory of cultural lag? How is cultural lag a cause of social disorganization?
8. Is a society like that of the Eskimo more integrated and harmonious than ours?
9. What examples, if any, can be cited of social changes or innovations which man might more easily or advantageously abandon than make adjustments to?
10. In what field today are cultural lags most prominent in our society? Why?

TOPICS FOR REPORTS

1. Goals in modern American society compared with those in a particular preliterate society.
2. Cultural lags in the field of modern education.
3. Criticism of the cultural lag hypothesis.

4. The Black Death as a cause of social disorganization in the fourteenth century.
5. The concept of social disorganization.
6. A case study of a disorganized community or neighborhood.
7. Indices of social disorganization.

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A comprehensive analysis of many problems in various social fields. Gives adequate recognition to the rapid change in technology and science, and to the lag in our ideologies and institutions, as a cause of social difficulties.

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A book well suited to younger students. The chapters are digests, set forth pedagogically, of contributions by various researchers.

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Society and Adjustment

There is a great deal of confusion in modern life, as was indicated in the previous chapter. When changes are as fast and numerous as they are today, many adults find the scene as bewildering as the closing of a circus seems to a child. The pulling up of stakes; the coming and going of animals, performers, and workmen; the noise and dust are apparently without much plan. The circus does, of course, proceed according to a plan; but what of human society? Does society go forward according to divine plan? It is a profound question. There are, to be sure, certain forces at work in human life. As was shown in the opening chapter, heredity, the group, and culture, operating against the slowly changing background of natural environment, not only affect the personality and social experience of man, but direct the onward march of civilization. But is there any special direction in which the process is tending? The attempts to answer this question have posited the concept of progress.

SOCIAL PROGRESS

The Idea of Progress

The history of the United States is supposed to be one of progress. We have advanced from the crude settlement of pioneers living on the edge of the wilderness to a vast and rich nation with a great expanding culture. "Bigger and better" are familiar terms in our society. Man himself has evolved from lower orders to his high estate. The American student of today takes progress for granted. It seems inevitable.

This interpretation may, however, be questioned. The clearing of the wilderness has brought farms where there were once wild beasts, but it has also brought more floods and more destruction of the soil. We are now a richer country than we were a hundred years ago, but is the acquisition of wealth progress? Jesus Christ inveighed against the rich of his day. We move about the earth in faster time, but does the motion bring more happiness or health or comfort or peace of mind? If our greater number of laws is accompanied by more crime, is that progress? Visitors from the older civilizations of the Orient or the lesser civilizations of outlying regions marvel at our material achievement, but often question whether it represents progress. The government is extending its activities so rapidly that it has become a huge and complex organization, difficult for the ordinary voter to comprehend. Democrats and advocates of *laissez-faire* question whether such a development of the state is progress. Socialists say it is a movement in the right direction. There is much difference of opinion about what progress is.[1]

Evolution versus progress. These comments make clear the advisability of differentiating evolution and progress. Evolution

[1] Wilson Wallis, *Culture and Progress* (New York: McGraw-Hill Book Company, Inc., 1930).

is merely change in a given direction.[2] When we speak of biological evolution, we refer to the emergence of certain organisms from others in a sort of succession. In the case of cultural evolution, as was seen in earlier chapters, every new invention has a history; that is, it grows out of, and is dependent upon, certain previous inventions. Evolution describes a series of related changes in a system of some kind. The reference is to an objective condition which is not evaluated as good or bad. Progress, on the contrary, means change for the better. The adjective *better* may denote an objective measurement of performance; but when applied to a general term like progress in a large body of heterogeneous societies and institutions, it clearly implies a value judgment.

The subjectivity*[3] *of values. For values, like taste, there is no measuring stick. *De gustibus non disputandum est.* A particular change in culture may seem, to one person, to be progress; to another, retrogression, because they have different values. The growth of large-scale business is regarded by Rexford G. Tugwell[4] as a forward step that makes economic planning and control more nearly possible. To Justice Louis D. Brandeis[5] big business was a curse and a step backward. The change itself is an objective fact, but the two observers whose values differ attach different significance to it.

Progress in technology. In the case of technology it can be said without contradiction that there has been progress from the age of the stone club to the age of steel alloys and of mechanical power.[6] What is meant here, however, is not a moral evaluation, but simply a description of the fact that tools have become more varied and efficient. But whether our technological age, all things considered, is better than a more simple life with simple tools is a question of evaluation about which there is no agreement. The reason that we may so confidently say that there has been progress in tool-making is that tools are judged by a function that can be measured such as, let us say, cutting. There is nothing subjective about our evaluation of the efficiency of this process. If, however, our judgment passes to an appraisal of the influence of tools on society in regard to some special effect that cannot be measured, as for instance on the sum of human happiness, a definite conclusion cannot be reached. Similarly, Tugwell and Brandeis might have come to agreement on the "progress" of big business if they could have singled out some one trait, such as production, and measured it. But they thought of various non-measurable social effects; each emphasized some special but different aspects, and assigned different values to them.

Can one hundred million people be wrong? The agreement of many persons on a value does not determine the issue. When large numbers of individuals have values, individual differences tend to be ironed out

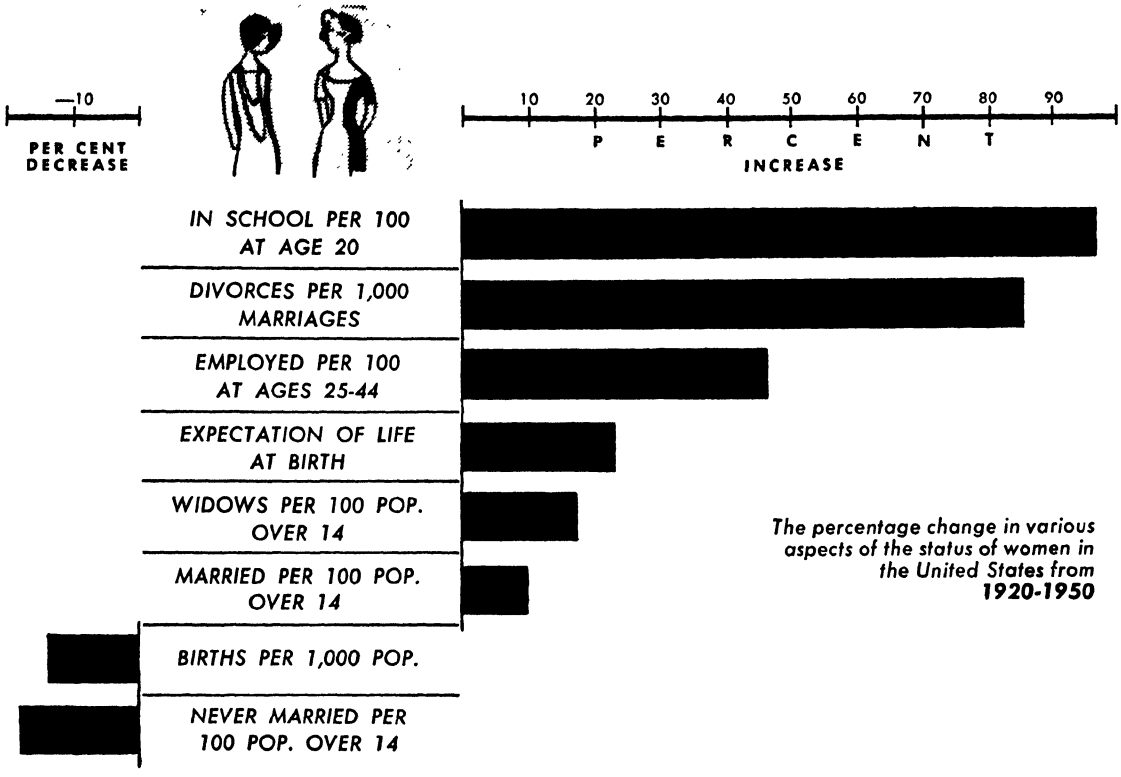
[2] Leonard T. Hobhouse, *Social Evolution and Political Theory* (New York: Columbia University Press, 1911), Chapter 7.

[3] The word *subjective* means that the characteristic exists in the mind of the observer and is not a feature of the object under observation. Hallucinations are extreme cases of the subjective, though most distortions of reality are less extreme. Thus a person may see many bad features of a strong government not seen by others. If this person as a child rebelled against a strong authoritarian father, he may have developed the habit of reacting unfavorably to strong authority, which habit may well be rationalized, since man in our society is supposed to be reasonable. This habit mechanism may be set in motion by any symbol of strong authority, such as a policeman or an employer. If a strong government becomes a symbol of a hated authoritarian father, its objectionable features may all exist in the subject rather than the object.

[4] Rexford G. Tugwell, *The Industrial Discipline and the Governmental Arts* (New York: Columbia University Press, 1933), pp. 187–221.

[5] Alfred Lief, *The Social and Economic Views of Mr. Justice Brandeis* (New York: The Vanguard Press, 1930).

[6] Hornell Hart, *The Technique of Social Progress* (New York: Henry Holt & Co., Inc., 1931), p. 53 ff., "A Quantitative Index of Progress in Tools"; also Chapter 4, "Technological Progress."



The percentage change in various aspects of the status of women in the United States from ***1920-1950***

291 Change Versus Progress

The figure above shows the percentage change in various aspects of the status of women in the United States from 1920 to 1950. Have women made progress? In any one of the above criteria we can measure the change. But these measurements do not prove whether there has been progress or not. Perhaps nearly everyone will agree that for young women to continue their education until they are 21 years old is desirable. Yet some may think they should not postpone marriage and childbearing that long. The proof of the desirability of any one of the changes listed above is difficult. How much more difficult to prove that women are better off in all these and other respects, taken together. To the general and inclusive question "Are the people of the United States better off now than at some time in the past?" an answer of yes or no is worthless.

and the consensus of opinion comes to have greater weight than any one individual's opinion. Majorities determine elections and verdicts of juries. Consensus, however, is open to the same subjective influences and rationalizations as an individual's values. The persecution of witches was once held to be desirable and was in line with progress according to the general opinion of the time. The burning or hanging of witches today would not be deemed progress. Capital punishment for stealing cattle was thought to be a progressive step in early California, but it is not so held in that state today. Capital punishment for murder is valued as good practice in the United States now, but it may not be in the future. Consensus of opinion is inconstant.[7] This point was developed more fully in Chapter 3, where it was shown that nearly every value we cherish today has been condemned by some other people or at some other time, and that those we condemn today have been highly praised by others.

[7] Wilson D. Wallis, *op. cit.*

The question of universal values. It may be asked: are there not some values that have been held good in all cultures at all times? While no one has ever taken a census to find out, it would be possible to go through the histories and the ethnological monographs in search of values that are common to the peoples whose cultures have been recorded. If this were done, the findings would no doubt have to be stated in very abstract terms.[8] "Thou shalt not steal" is a commandment common to many cultures. Yet, when the abstract term, *stealing,* is applied to concrete situations, the guidance of the generalized commandment is not very helpful. The Blackfoot Indians praised stealing from the enemy, as have many other peoples. Slaves often steal from their masters, and among themselves the practice of taking from their owners may not be held bad. The same comments may be made upon the commandment, "Thou shalt not kill." War and legal hanging are both considered necessary at times, and each results in loss of life. Again, the goals of progress are sometimes stated in such abstract form as the attainment of "the greatest good or the greatest happiness for the greatest number." But even though such desiderata be held in many cultures over a long period of time, they indicate neither what actions are to be taken to secure these ends, nor when these ends are attained. Conceptions of happiness differ as do ideas of what is good for a people. In a word, while it may be possible to formulate conceptions of progress or valuations of change which apply to all time, the statements are too general to afford definite and sure guidance in specific situations at different times and in different cultures. The general goal of "true social cooperation" has been posited by Hobhouse[9] as a basis for determining progress. As another illustration, C. M. Case[10] has argued for the criteria of utilization, equalization, and appreciation. While such general principles do not afford specific guidance, they nevertheless serve as tools to be used in thinking out the course of action we wish to pursue.[11] Conceptions of progress, like general ethical principles, are of great value.

Tests of group welfare. There have been various recent attempts to formulate more specific tests of group welfare, such as longevity, mental health, amount of leisure time.[12] But it would be a mistake to think that these values have universal acceptance. For instance, our own society places a high value on longevity, and great efforts are made to extend the length of life. This is not so true, however, in societies where suicide is institutionalized, as in the East Indian practice of suttee. If a people believes there is a happier land to which to go after death, under certain circumstances death may be preferred to continued existence on earth. Much the same observation may be made concerning mental disorders. As was shown in Chapter 12, psychotics in some societies are esteemed rather than pitied.

Progress as movement toward a definite objective. It might seem to the student that the preceding paragraphs have analyzed progress away. But such is not the case. For most persons there is such a thing as progress. It is a movement toward an objective in the visible future, thought by the general group to be desirable. Thus, in our society the abolition of child labor is deemed a step in the direction of progress. Though there may be some individuals who do not think so, general opinion holds that it is de-

[8] John Dewey and James H. Tufts, *Ethics* (New York: Henry Holt & Co., Inc., 1908).

[9] See Hobhouse, *op. cit.,* pp. 152–153.

[10] Clarence M. Case, *Social Process and Human Progress* (New York: Harcourt, Brace & Co., Inc., 1931), Chapter 4.

[11] Dewey and Tufts, *op. cit.*

[12] Cf. Hornell Hart, *op. cit.;* also J. K. Folsom, *Culture and Social Progress* (New York: Longmans, Green & Company, 1929), Chapter 5, "A Proposed Barometer of Welfare."

sirable to keep young children from working in factories.

When considering social progress, it is well to note the time and place qualifications. The abolition of child labor is an objective for our society in the present and near future. This aim may not be desirable in other cultures, and we do not know whether it would be what we would want a thousand years hence. If we look too far away we have trouble with the idea of progress. Child labor among the Bantu may be quite different from child labor in cotton mills in the United States. Likewise if we look too far ahead we are confused. It is undoubtedly desirable to look some distance into the future, but man cannot see many things very far ahead; he cannot see light with wave lengths shorter than those of ultraviolet, nor can the average person hear sounds of greater speed than twenty-thousand vibrations per second. Why should man build for a trillion years hence? Who knows what conditions will be then? Kaempffert has described them as follows:

> Jeans has calculated that we are spiraling from the sun at the rate of little more than a yard in a century. In 1,000,000,000,000 years we shall be 101,530,000 instead of 92,300,000 miles away. . . . The terrestrial temperature will be 54 degrees Fahrenheit lower than it is now, and the earth will be reduced to an icy ball swimming through space. If they have not evaporated long before then the oceans will be frozen masses. . . . The curtain falls when the atmosphere is precipitated first in blizzards of carbon dioxide and finally in a downpour of liquid air. No inventive ingenuity can stave off death. After having stumbled into a universe that was never destined for life, man will be blotted out by forces that were hostile to him from the beginning of time and over which he triumphed for a brief hour.[13]

[13] Waldemar Kaempffert, *Science Today and Tomorrow* (New York: The Viking Press), pp. 39–40. Copyright, 1939, by Waldemar Kaempffert. By permission of The Viking Press Inc., New York.

But even if the sun should explode, as many stars have done, and destroy the earth in the distant future, that is no reason why we should not here and now prevent little children from growing up pale, anemic, and weak-boned in the shadow of sunless tenements. Even though the intellectuals split hairs in argument over whether the concept of the "greatest good for the greatest number" as a goal of progress is valid because it does not conform to a normal probability curve, why should we allow one person to go insane every four minutes?[14] Even though we cannot find a definition of progress that fits all societies at all times, why can we not prevent the manufacture and use of atomic bombs? Even though we may not all agree on what social adjustment is, may we not work to prevent a third world war which might destroy most of the big cities of the countries attacked or possibly kill 50,000,000 in a sneak attack in one night?

SOCIAL CONTROL

The task of directing social change. The analysis to this point has shown the subjectivity and variability of goals, and the difficulty of determining whether complex social changes are in the nature of progress.[15] Because values are subjective, many social scientists dismiss them summarily and give them no consideration whatsoever. This is an attitude apparently appropriated from the natural scientists, who deal with things that do not possess values. In the case of human beings, however, it must be recognized that all groups set up values which are of the greatest significance for social life. The fact that consensus is subjective does not mean it is insignificant; quite the contrary, it

[14] *Statistical Abstract of the United States,* 1948, p. 85, gives the number of first admissions in 1945 as 141,718.

[15] See A. J. Todd, *Theories of Social Progress* (New York: The Macmillan Company, 1918), especially Chapter 7, "Criteria of Progress."

influences human experience profoundly at many points. While it is probably not for the sociologist as a scientist to set up values, it is quite within the province of the sociologist as a human being to have values and to work for them. It is also important for him to recognize the values which are set up by the consensus of groups. Human values are, to the scientist, a system of data to be considered objectively like all other phenomena.

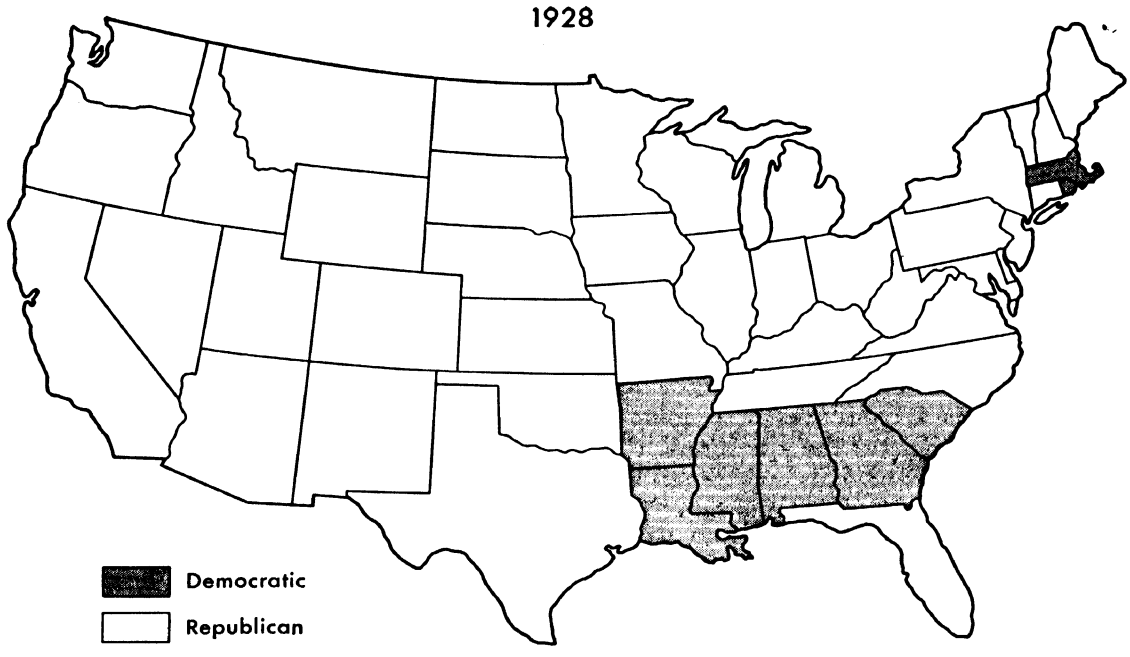
Since there is a consensus of opinion on goals in every society, the questions arise: in terms of his own goals, what can man achieve? what goals can he attain? what control can actually be exercised? We have learned to control quite effectively the disposal of garbage, the burning of buildings, the pollution of the water supply. The activities of a modern city reflect an enormous amount of control. Much has been done to control the plagues that once worked such havoc. Man has overcome the forces of gravitation to fly through the air. The limitations of space he has transcended also, to the extent that he can converse across oceans. He has been able to dam up the mighty forces of rivers and to make the desert bloom. Yet man has not been able to control crime as he wants to do. The divorce rate is mounting, and the rate of insanity may be increasing too. It is clear that, while there is some control in human affairs, there are practical limits to the extent of control. The fact that we can control the disposition of garbage does not justify us in thinking we can control evolution. Important, then, is the inquiry to which we turn, a consideration of the measure of control man now possesses.

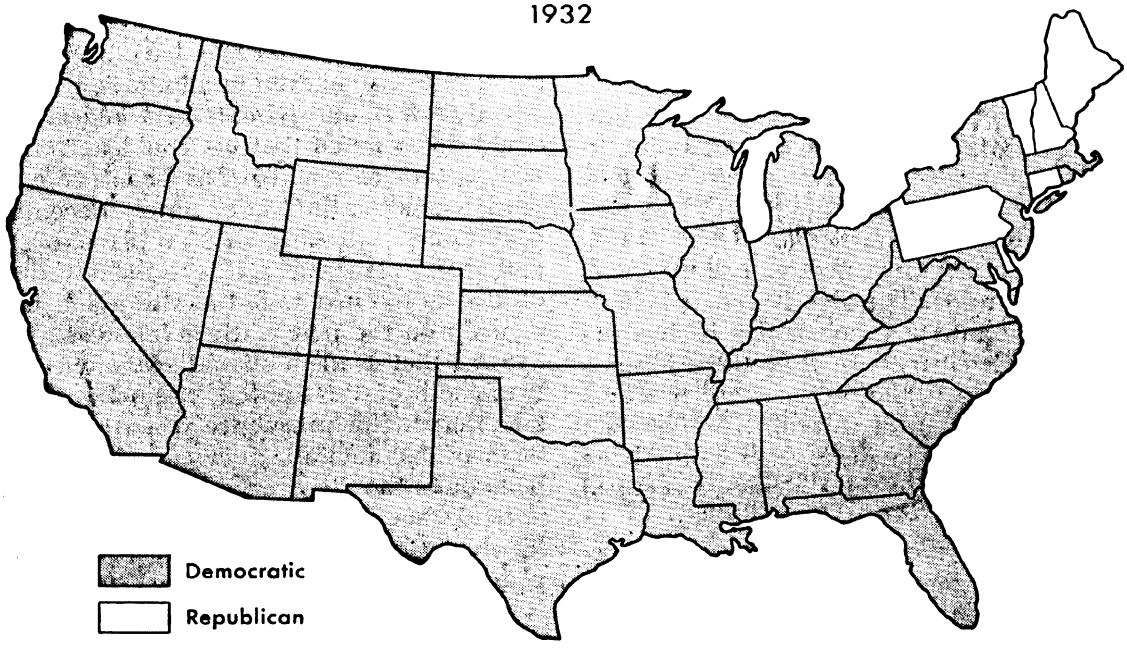
Leadership and control. Before taking up the discussion of man's control of social change, it is desirable first to make certain observations concerning leadership which may throw some light on the problem in hand, for control is generally effected by or through leaders. It is common knowledge that a social program may suffer because of poor leadership. The movement for a Union of Europe suffers because of the lack of a capable leader. A strong leader may be able to achieve a great deal. Winston Churchill was a great wartime leader. The history of many a college shows a period of particularly great prestige which is usually associated with the administration of an outstanding leader.

Leaders may be effective and necessary, but their role is often exaggerated, especially by themselves. While the power of the leader is generally appreciated, there is insufficient recognition of his limitations. It is most important in dealing realistically with progress and leadership to dismiss once for all the current fantasies and daydreams so widely prevalent. We tend to overestimate the originality, initiative, and even ability of the leader. We are much inclined to hero-worshiping, a trait that may have been inculcated in us as children in admiration of, and affection for, our parents and elders who could do so much that we could not. Once this pattern of reaction has been set up in the personality, the leader simply becomes a conditioned stimulus in the place of the parent.[16] Furthermore, it is to the advantage of leaders to encourage the attitude of hero-worship on the part of their followers. It is natural that leaders should claim victories. Presidents of the United States have often taken credit for prosperity when it was due to favorable rainfall in the wheat and corn belts or to the discovery of gold mines. It is natural, therefore, that presidents are blamed for business depressions, which they also play little part in making.

It is naïve to imagine that leaders initiate plans *de novo*, especially in a country like the United States where so many pressure groups exist. In any case, as was pointed out in an earlier discussion of inventions, the

[16] W. F. Ogburn, "The Great Man Versus Social Forces," *Journal of Social Forces*, 5: 225–231, December 1926.





292 The Great Man Versus Social Forces

In 1928, Herbert Hoover received 444 electoral votes and Alfred Smith, 87. Four years later Hoover received 59 votes and Franklin D. Roosevelt, 472. Before his election to the presidency, Hoover had won a considerable reputation as administrator of European relief; but after his election, there was a severe business depression, for which he was held accountable, although bad times have occurred in Democratic as well as Republican administrations.

leader is limited in what he can do; he is limited by his materials, by his knowledge, by the social attitudes of the group. The German Emperor Frederick II, a great man with a forceful personality and an able mind, was perhaps the most enlightened ruler of his era. He was modern in outlook and ideas. But he dashed himself to pieces by opposing the papacy, for the mores of his time were ecclesiastical and hierocratic, and the people could not conceive of a state being "good" if it was not in complete harmony with the prevailing church.[17] Similarly, a leader in the United States in the nineteen-forties could not prohibit the sale of liquor throughout the nation, nor could he permit unlimited immigration. If a leader tries too many undertakings that fail, he becomes ineffective and is deposed. Even dictators have their great power only in theory. In practice they are by no means free to act as they please. They also have advisers, and in a culture with a high development of the communication inventions they respond to pressure. From this it may be inferred that a good leader is one who knows also how to follow.

While the popular view is that the leader makes the times, a realistic view emphasizes the exact opposite. There is some reciprocal action, but it is interesting to note that leaders have a way of arising in times of crisis. General Eisenhower and General Bradley could not have achieved their greatness without a war. Presidents of the United States during wars tend to be great, for they then have more opportunity for great achievements. It is difficult for a president to be a great man unless some great crisis occurs in his administration. Our six greatest presidents, Lincoln, Washington, F. D. Roosevelt, Jefferson, Wilson, and Jackson[18] all lived in periods of crises for the government.

These remarks in no sense deny leadership. They are intended merely to provide a realistic conception of the leader in an attempt to find out what can be done to control social change, in contrast to the storybook conception of great men. Leadership is necessary in any directing of social change, but it is also very definitely limited by the determinism of social forces.[19]

The Realistic Approach to Control

Despite the limitations of leadership, and the difficulty of deciding on goals, societies do undertake to control change. We now turn our attention, therefore, to a consideration of man's power to control his destiny. Here again, it is necessary to differentiate what is fantastic and what is practical. We may wish to build a bridge across the Atlantic Ocean from New York to Liverpool, but such a wish is the stuff that dreams are made of. We are familiar enough with engineering to realize that it is not practical at the present time. But somehow in the realm of social progress we have our daydreaming and social engineering all mixed up. Some groups wish to abolish war by avoiding a fight and others wish to prevent birth control by not practicing it. What seems simple for the person appears likewise easy for society. But such tasks are as difficult as building a bridge across the Atlantic. Many still believe in miracles in the social world, though the idea has been abandoned in medicine and physiology. Some day, war and birth control may be abolished; but, if so, the task will have to be approached with full consid-

[17] For other examples of great leaders who suffered defeat by opposing the mores of their time, see William Graham Sumner, *Folkways* (Boston: Ginn and Company, 1906), pp. 87–88.

[18] By vote of 55 historians and political scientists, reported in Arthur M. Schlesinger, *Paths to the Present* (New York: The Macmillan Company, 1949), p. 95.

[19] "The leader is a cause, but, like all causes we know of, he is also an effect." Charles H. Cooley, *Human Nature and the Social Order* (New York: Charles Scribner's Sons, 1922), p. 357.

eration of materials, ways and means; that is, it will be achieved not by the mere magic of wish fulfillment but by the techniques of social engineering.

Since the world is governed by social forces and not by mysterious leadership, a practical rule is to try to figure out first what is likely to happen as a result of the social forces. Do the social forces favor or oppose the proposed change? This question, if properly envisioned, takes the issue out of the world of fantasy and puts it into the world of reality. After this question has been answered to the best of our knowledge, then and then only is it good practice to ask another question: what can we do about it? To ask what can be done to bend the direction of the social trend is a more realistic approach than to start with the idea that we can do anything we want to do, if only we have enough faith and will. We proceed to ask what is likely to happen in our changing world, with reference to the three factors, natural environment, biological heredity, and culture.

FACTORS BASIC TO GROUP LIFE

Problem of man's control over natural environment. The measure of man's control over the natural environment was discussed in Chapter 5, hence need not here be considered at length. Man has achieved some remarkable controls, such as the creation of artificial climate. The natural environment itself has been altered by such things, among others, as deforestation and reforestation, the drainage of swamps, and the diverting of rivers into new channels. And now man can produce rain at a definite time and place. In other cases, more numerous perhaps, man has not controlled natural environment but only its effects. This has been accomplished by such inventions as clothing, the umbrella, housing, and air-conditioning. The darkness of night is offset by artificial light for automobiles, for ships, for airplanes, and for outdoor games. The natural environment remains essentially unchanged, but its significance for man is not the same since he has various inventions such as those just mentioned. It may be concluded that "man has broken down some geographical difficulties . . . improved the bearing of other conditions, and settled down to the endurance of still others." [20]

Fortunately there is no great need to control the larger aspects of the natural environment. For climate and the earth's surface, the course of change is negligible over short periods of time. It scarcely seems possible that man could control any great change along these lines; he could not, for example, prevent the onset of another ice age if it were to come. Fortunately no such occurrence is indicated for the near future.

Problem of control over biological man. Human heredity is likewise relatively stable. For a whole people, biological selection is measured in hundreds of years, and mutations perhaps in thousands. There has probably been no significant biological change in man's hereditary endowment for perhaps ten thousand years or longer.[21] The recent creation of mutation in the fruit fly by X-ray is not specific, and results in defective genes; it is of no value at present for the purpose under consideration. Heredity is the great stabilizing force. The facts, then, give no encouragement to man's dream of evolving soon into a superman, a dream which so intrigues romantic minds like those of H. G. Wells and George Bernard Shaw. On the other hand, it is comforting to think that the possibilities of degeneration are also remote.[22]

[20] Isaiah Bowman, *Geography in Relation to the Social Sciences* (New York: Charles Scribner's Sons, 1934), p. 118.

[21] Edwin Grant Conklin, *The Direction of Human Evolution* (New York: Charles Scribner's Sons, 1921), p. 59: "There can be no doubt that human evolution has halted, either temporarily or permanently. . . ."

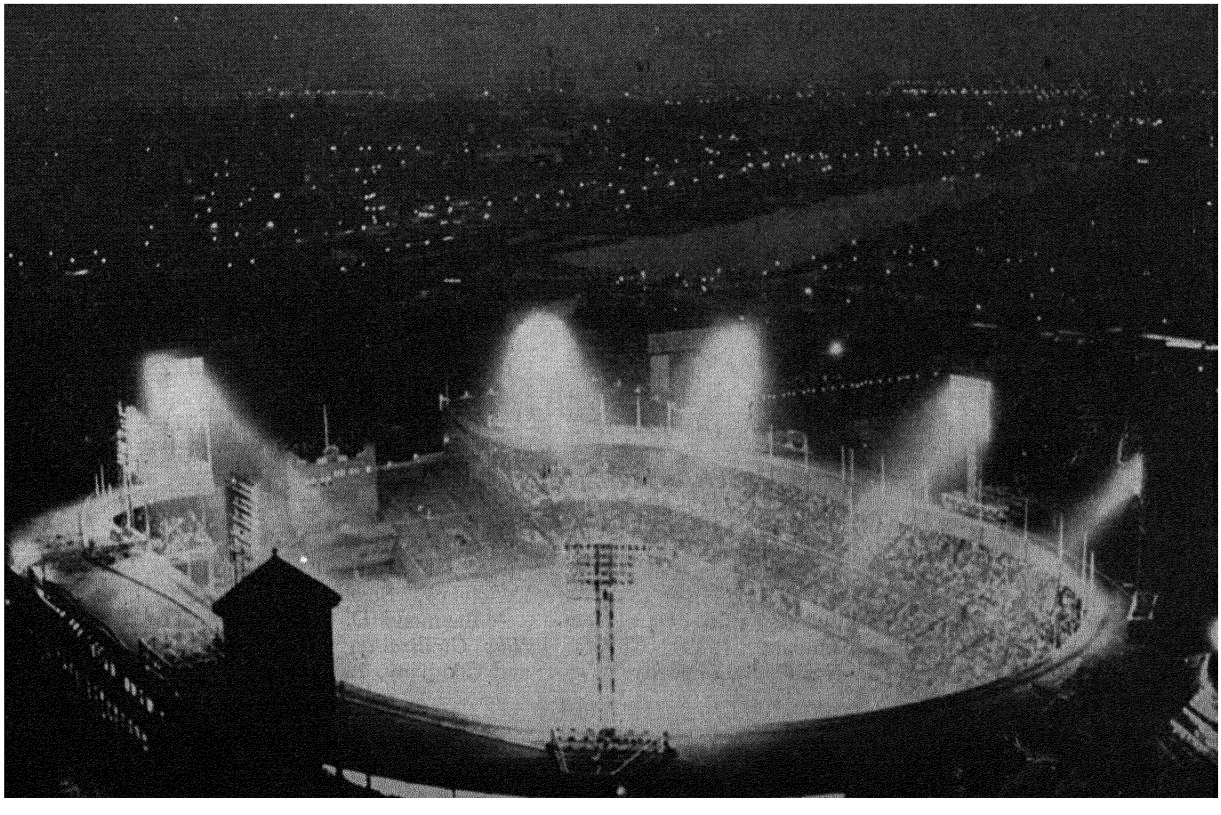
While the course of change in biological man may be modified over long periods of time, the likelihood of modification in the immediate future is not great. Although our knowledge of the laws of heredity has advanced remarkably within the past twenty-five years, our ignorance of the genes possessed by different family lines is still great. Biological stocks of family lines have risen and fallen in the past, but the selection was not consciously planned or executed by man. It would seem that the best prospect for eugenics in the near future is the denial of offspring to persons obviously carrying certain defective genes. As was pointed out in Chapter 4, this type of negative eugenics may prevent to a small extent the appearance of defectives, but the achievement will not be great because most defective genes are recessive, and whether an individual carries them or not cannot be told in advance. It is well to bear in mind, however, that research in genetics during the next hundred years or so may radically alter the eugenics program as it exists today.

Even if the knowledge requisite for changing biological heredity were available, there would still remain the problem of control.[22] Man has so far not viewed the eugenics program with favor, if its achievements are a

[22] See Herbert S. Jennings, *The Biological Basis of Human Nature* (New York: W. W. Norton Company, Inc., 1930), Chapter 10, "What Can We Hope from Eugenics?"

293 Culture and Natural Environment

Man, unlike the owl, is biologically adapted to daytime activity and nighttime rest; but modern developments in technology, especially advances in illumination, push back the limits of the natural environment and affect social life, as in increased mass recreational activity at night. The scene below is the Polo Grounds. (Photograph from The Anaconda Company.



criterion. The program has met indifference or actual hostility. The sterilization program, for instance, has on the whole failed to win popular support, though in states having a sterilization law covering institutionalized persons, sterilizations officially reported up to January 1, 1949 totalled nearly fifty thousand.[23] The program has been repugnant to a people who love liberty and who hold to a social philosophy of *laissez-faire*. Even less cordial has been the popular attitude toward suggestions for bettering the stock through selective mating. It will be necessary to develop a different consensus on the part of the group if eugenics is to prosper. Such a new attitude is, of course, not impossible.

The prospect of improving individuals biologically during their lifetime is much better. This program does not involve the manipulation of the factors of heredity. Also, the process must be repeated in the case of each generation. The program calls for improving the environment in which the body grows. As was shown earlier, the control of disease, especially during the early years of childhood, has already led to an improved human constitution. Superior feeding, due to the knowledge about vitamins and minerals, has also contributed to this end.[24] Further gains along these lines may be anticipated. There is always the prospect also that fuller knowledge of the hormones will bring improved structure. Quite marvelous achievements have been made among the lower animals by dealing with the endocrine glands and the vitamin content of the diet. Striking character changes have been demonstrated in brown leghorn chickens by removing the ovary of a female chick two or three days after hatching. The chick grows up to be a typical cock in head furnishings — combs and wattles — and has typical cock plumage.[25] Young rats have been brought to maturity in the course of three to four days' treatment with fresh pituitary gland tissue.[26] Likewise old age has been brought on prematurely by giving rats a diet deficient in the filtrate of vitamin B.[27] Though these things have been done in the process of growth of animals in the experimental laboratory, such achievements seem to be quite impractical now for the growth of man. But he would be rash indeed who said that none of these seemingly miraculous changes would be made in man some time in the future. It may be concluded that, at the moment, the process of growth of the individual holds better prospects for human improvement than does the process of heredity in breeding.

Problem of control over culture. We come now to the realm of the superorganic, where changes have been occurring most rapidly. These changes have taken place, not through changes in man's biological nature, but through the addition of inventions, both mechanical and social. These have become numerous and frequent in modern times because of the accumulative nature of the superorganic.

Is it possible to control inventions? Raymond Fosdick[28] raises an even graver ques-

[23] *Sterilizations Reported to January 1, 1949*, Publication No. 5 (Princeton, N.J.: Birthright, Inc.).

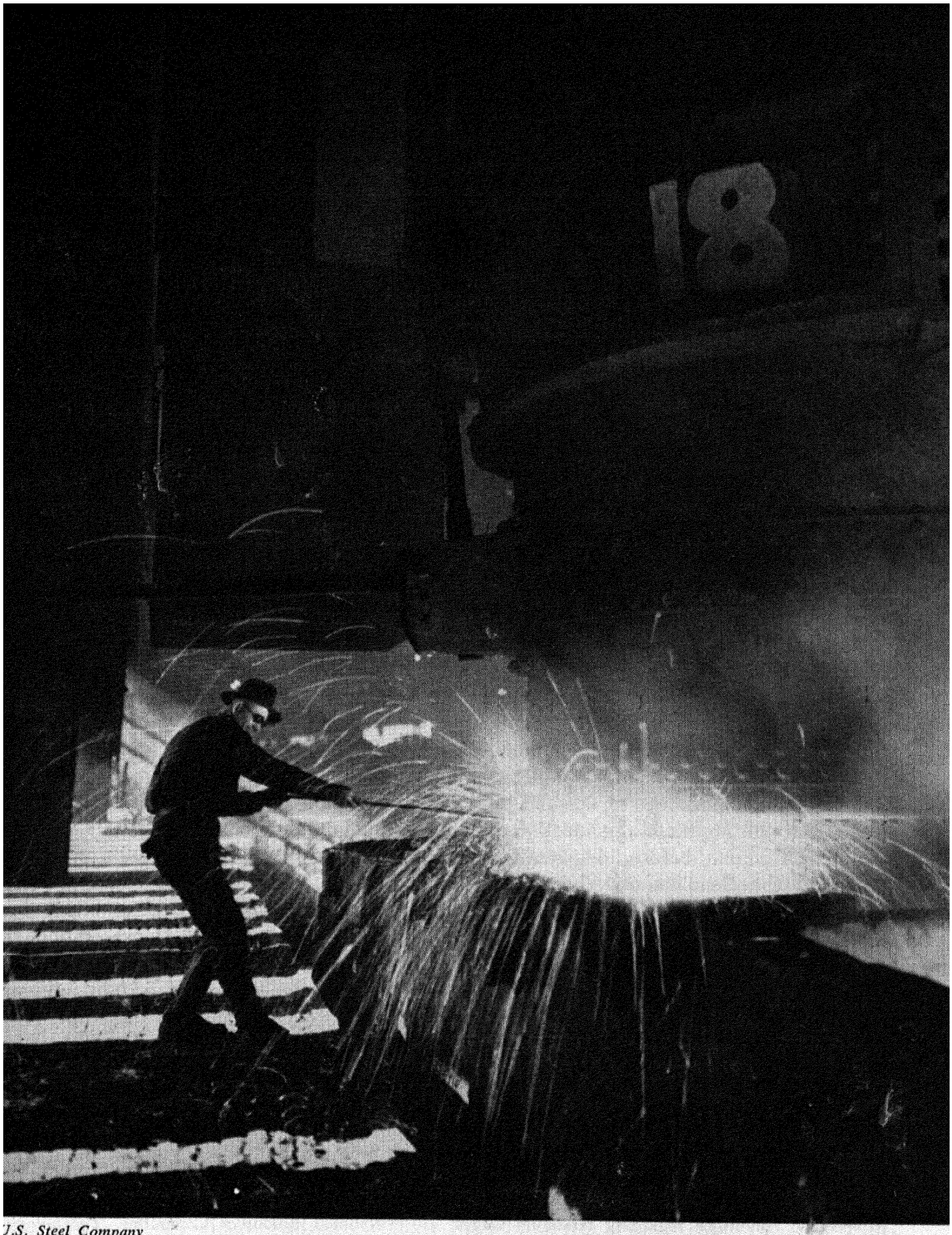
[24] For further discussion of these points the student is referred to E. V. McCollum *et al.*, *The Newer Knowledge of Nutrition*, 5th ed. (New York: The Macmillan Company, 1939), Chapter 28, "Diet in Relation to Healthful Longevity."

[25] L. V. Domm, "New Experiments on Ovariotomy and the Problem of Sex Inversion in the Fowl," *Journal of Experimental Zoology*, 48: 31, 1927.

[26] P. E. Smith and E. T. Engle, "Experimental Evidence Regarding the Role of the Anterior Pituitary in the Development and Regulation of the Genital System," *American Journal of Anatomy*, 40: 159, 1927.

[27] A. F. Morgan and H. D. Simms, "Adrenal Atrophy and Senescence Produced by a Vitamin Deficiency," *Science*, 89: 565–566, June 16, 1939.

[28] Raymond D. Fosdick, *The Old Savage in the New Civilization* (New York: Doubleday, Doran and Company, 1928), p. vi.



U.S. Steel Company

294 **Can Man Control His Technological Society?**

tion. He asks, "Can the old savage be trusted with the tools which he has created?" Or one may ask, will man with an atomic bomb behave less destructively than a chimpanzee with a stick of dynamite? It certainly does not seem practicable for man to control his inventions on a large scale, although certain individual, major elements may be regulated. It is conceivable that the introduction of the mechanical cotton-picker might be controlled,[29] or even the inception of a war. But would it have been possible to control the effects of the invention of the steam engine, which created cities and influenced family life, business, government, and religion so profoundly? Certainly not. Can the Orient stop the importation of Western culture? Is China free to import or not to import the mechanical inventions and social systems of the Western world, as it is sometimes claimed? These questions suggest the magnitude of the task.

Because inventions and scientific discoveries are held in favor by the population, their stoppage would be difficult; the control of inventions, by the way, is generally interpreted as meaning their promotion, not their denial. Inventions are stimulated by demand for them. Increased demand brings results through improved organization of research. Of course, before an invention can be made, the elements underlying it must first be in existence. No amount of demand for the steamboat in 1600 would have produced it because the steam engine had to come first. But considering our present great accumulation of knowledge, the chances are good that many inventions will be produced if the demand for them is strong enough. The drinking fountain could have been produced at any time after plumbing was developed, but it was delayed until the germ theory of disease became common knowledge and created a demand for a more sanitary public drinking apparatus. With the resources of a wealthy civilization supporting the strong demand for a cure for cancer, it is likely that the disease will be brought increasingly under control. These observations show how difficult it is to speed or slow up inventing.

It is to be noted that the production of more useful inventions — social or mechanical — or the crushing out of harmful ones, does not represent complete control over the superorganic. The reason is that inventions not only have immediate uses; they also have derivative effects throughout the superorganic. The two conditions are different and must be kept distinct.[30] The stimulus that leads a man to produce a useful invention is its immediate use. He wants to make more yards of cloth with a new weaving machine run by steam. He does not realize it will have the social effect of increasing divorces. The problem of the control of social change resolves itself largely into the problem of the control of the effects of inventions.

Before these social effects can be controlled, they must first be anticipated.[31] We are far from showing such foresight in our present civilization. Social effects are generally not only not anticipated; they are not recognized even when they come, and they are heeded too late. The automobile had an effect on another type of transportation, the railroad; but the effect was not appreciated in time by the owners of certain railroads, who soon found themselves bankrupt.

The process of change is one in which the invention comes before we anticipate its social effects. Instead of controlling invention, invention is cracking the whip to make us

[29] The Rust brothers, inventors of such a machine, proposed to lease it only to persons agreeing to specified conditions regarding minimum wages, maximum hours, child labor, and displacement of labor.

[30] For fuller discussion of the distinction between the immediate uses of an invention and its social effects, both direct and derivative, see Chapter 24.

[31] National Resources Committee, *Technological Trends and National Policy* (Washington, D.C.: Government Printing Office, 1937).

hurry to adjust to the effects it creates. It is as though we were always running to try to catch the technological train.

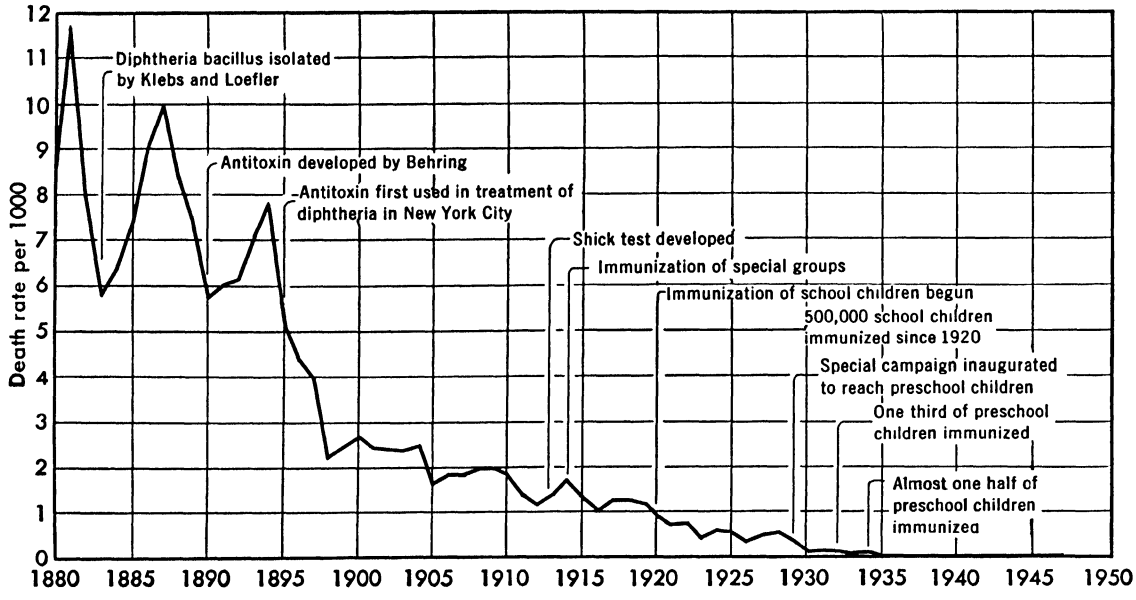
This discussion has so far been concerned with the possible control of mechanical inventions and their social effects. The same analysis holds for the control of social inventions and their influences on society. It was difficult to foresee a recent social invention, the communist state, exemplified by Soviet Russia. This invention is certainly difficult to control. Once in operation, the effects of the Communist state on personality and behavior, on customs and manner of life, are impossible to control. Again, if we cannot control war, how can we expect to control all its many social effects? So, too, the business depression cannot as yet be prevented, nor can we control the social effects of the business cycle. Indeed, we do not even know as yet what all of the effects are, although we have experienced some very severe depressions. The prediction of the social effects of social inventions is, then, as difficult as in the case of mechanical inventions.

No doubt this problem of predicting effects of inventions, like other problems, would yield results if it were studied more fully. But few scientists are seriously trying to find what will be the future effects of the new technologies; instead we spend much time in analyzing past history, which does not repeat itself in an age of change. The human race is like the passengers in a bus with seats turned so that they always look backward. The driver too looks backward while the bus hurtles ahead at terrific speed across the open country through the mist. It is preposterous to talk seriously about controlling social change when so few are looking ahead for the derivative influences of inventions.

The adjustments at points of strain. It should be clear from the foregoing discussion that to boast about controlling social evolution and directing the course of progress is much too grandiose, though to do so is quite in keeping with man's ego and dreams. Man cannot control geographical conditions, he cannot control biological evolution, and he cannot at the present time control the superorganic. What can he do? We need not answer, as the ancients did, by comparing man to "the fly who, sitting on the axle of the chariot wheel, said, 'What a dust do I raise!'" Man's will and wish do play a part in the course of change, even though the role is, as far as we can see, a more modest one than is generally supposed.

Even if natural environment, culture, and heredity cannot be controlled as we would like, the conclusion need not be discouraging. Indeed, if we could control them, that fact might be discouraging, since our knowledge of the ends to which we might direct the changes is so meager and unsatisfactory. The really urgent need for control is at certain critical points in these three great areas where they impinge on each other. We cannot control the whole geographical environment, but we can control the floods of the Ohio River, a focal point where the superorganic and the inorganic worlds are not well adjusted. Fortunately, it is just these critical sectors that are often amenable to control. Many of them are within reasonable reach of man's abilities. The places where control is most needed are generally those that are the most susceptible to practical social engineering. These are the areas where social problems are said to exist, and vigorous efforts to solve them will often meet with success. The practical need, then, is not so much for control over the basic processes of change as it is for control over the focal points of strain which these processes produce.

The basic factors and social adjustment. This book, which is fast drawing to a close, has dealt with certain basic factors in the social life of man: culture, heredity, geographic environment, and the group. These

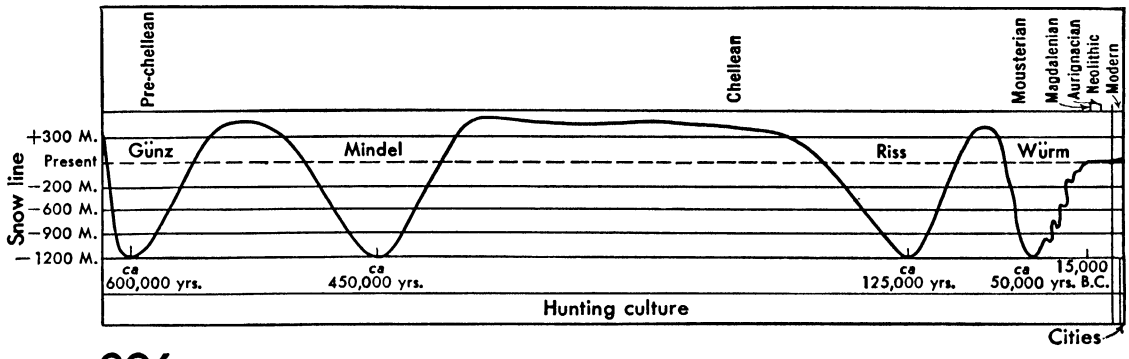


295 The Decrease in the Annual Death Rate from Diphtheria

This chart, which plots the decrease in the crude annual death rate from diphtheria per 1,000 children under ten years of age in New York City between 1880 and 1947, shows the remarkable progress in the fight against diphtheria made possible by scientific discoveries and public health programs. The progress is in terms of a specific objective set up by the community — namely, the prevention of death from disease. From L. I. Dublin, A. J. Lotka, and M. Spiegelman, *Length of Life,* Revised Edition. Copyright 1949 by The Ronald Press Company.)

phenomena have been analyzed and their functioning has been described. In this closing section we have discussed these factors from the point of view of change, and in this closing chapter we have been concerned with whether the course of the changes in these factors is one of progress. It seems impossible to find agreement or a scientific answer as to what progress is for a very long period ahead or for a great variety of cultures, though there are a number of general statements of goals that are helpful as tools in trying to direct a particular change in a progressive way.

The four factors dealt with in this book can be used as the basis for a unifying concept. This systematization rests on the idea of change and the idea of adjustment. All these factors are in a process of change, though the changes in natural environment and in heredity evolution are very slow. The superorganic and the types of groups which it fosters are in modern times changing very rapidly. Since these factors are all correlated, but are changing at unequal rates of speed, there naturally arises the question of whether these changes lead to good adjustments or to maladjustments. This concept of adjustment among changing factors was developed in the preceding chapter where it was observed that the different parts of the superorganic changes at unequal rates of speed. It is possible to use this concept of harmonious adjustment among the changing factors of nature, man, culture, and group as a tool of guidance in control. In any given culture, collective action on a social problem can in many cases be taken, with a view to working out a more harmonious adjustment of the several factors involved.



296 **Time Chart of the Development of Culture**

The approximate variations in the snow line which occurred during the ice ages of the past are shown in comparison with the situation at present. The type of culture which prevailed at each period also is shown. It is seen that for hundreds of thousands of years man lived in a hunting culture, but his experience with modern city life has been relatively brief. The chart also indicates that cultural changes were very slow at first and have gradually occurred faster and faster. (Adapted from W. L. H. Duckworth, *Prehistoric Man*, New York, G. P. Putnam's Sons, 1912, p. 118, Fig. 25.)

Nearly everyone would like to lessen the amount of illness, which is an unsatisfactory adjustment between biological man and his environment. We work hard at programs of public health and at the development of scientific medicine. Many mental disorders are a maladjustment between our inherited nature and the superorganic, and few there are who would not want a better adjustment. Soil erosion is by common consent an unfortunate adjustment between nature and the superorganic.

Business depressions are maladjustments resulting from contemporary changes. They did not exist in earlier ages. Their counterpart then was famine, a bad adjustment between nature and man. Tragic maladjustments are found in the distant past, as well as in the present, and are likely to occur in the future as far as we can see. For hundreds of thousands of years man was adjusted to an environment which called for muscular activity in the open air and the consumption of certain types of foods. Since this type of life existed for such a long time, it must be assumed that man achieved a fair measure of adjustment to it.[32] But now, suddenly, the superorganic has produced cities, a radically different type of environment. Is man well adjusted to sedentary life indoors and to long hours at monotonous repetitive tasks? Does the cave man live satisfactorily in the modern city? It is theoretically possible for the changed superorganic to have brought about an environment to which man is better adapted. He may, of course, be better adapted to the factory machine than to the saber-tooth tiger. But the question is a permanent one, for the problem of adjustment between man and his culture will always exist.[33]

Biological man is fortunately very adaptable, more so than most other animals. He lives in nearly every land of the earth. But this adaptability is not infinite. If pushed too far, strains appear. So also culture is highly modifiable. Satisfactory adjustments would seem possible.

Attempts to control change and to secure better adaptations can be made through reform movements which initiate changes of a

[32] G. T. W. Patrick, *The Psychology of Relaxation* (Boston: Houghton Mifflin Company, 1916).

[33] John Dewey, "The Interpretation of the Savage Mind," *Psychological Review*, 9: 217–230, May 1902.

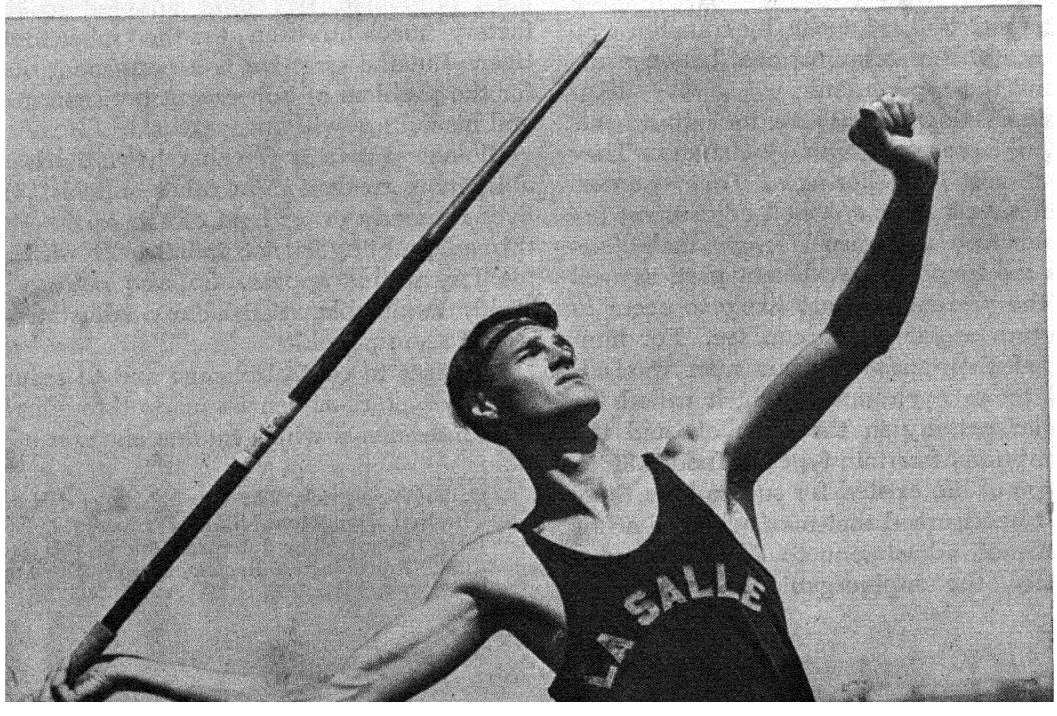


Galloway

297 Toward a Better Adjustment

For hundreds of thousands of years men and women lived active outdoor lives, as did their arboreal ancestors. Recreation is the modern substitute for their muscular activity. Our most popular sports are hunting and fishing. In baseball there are three motions common in the life of the hunter: running, throwing, and hitting. The gymnasium is an invention to utilize faculties employed daily by primitive hunters, but little used in modern sedentary life. Similarly, the theater is an outlet for emotions little expressed in the routine life on the assembly line.

Photo by Harold M. Lambert



slow, evolutionary nature. But sometimes the changes come precipitately in revolutions. These two methods of change occupy our attention in the next section.

RAPIDITY OF CHANGE

Reform and revolution. In a stationary society, after adjustments are once made they are abiding. In a changing society such as ours, however, such is not the case. New conditions bring new problems and further need for readjustment. Even on the old problems, new viewpoints are likely to develop. New insights are continuously being acquired as the result of new discoveries and inventions, and these tend in some measure to effect a new consensus. A demand thus arises for a change or reform in the old procedure. In the case of persons suffering from mental disorders, there have been many reforms in treatment in recent years. At one time certain mentally disordered individuals were thought bewitched and were executed. Even quite recently the insane were simply segregated, and often abused. The idea of caring for them sympathetically and scientifically is of very recent date, and represents the outcome of a vigorous reform movement. In a changing society there are usually numerous reform movements — that is, organized attempts to change the type of control employed in critical situations.

Reform movements go through a series of steps or periods somewhat as follows.[34] First the need for the change is recognized, usually by a few individuals. They agitate for reform. If their propaganda is successful, it results in a growing public awareness of the need for the change. At this point the program may be more definitely formulated and an organization set up. Then follows the second period, one of campaigning, with special effort being made to bring pressure to bear upon those individuals and agencies that play strategic roles in the situation. If the reform movement is successful, its program is established and, in the third period, becomes part of the accepted institutional set-up. In due course, new dissatisfaction may arise, and the cycle may be repeated. Since reform movements are in the nature of social inventions, they are subject to the same tests as inventions in general. That is, their success depends on whether or not they fit into the folkways, suit the public mood, and are workable. Equally important is the fact that reforms must reckon with the opposition of the vested interests, the groups that stand to lose something if the change is effected.

Revolution is a rapid cultural change of some magnitude. It is a function of innovation which is more likely to occur in a single series than in the whole of the superorganic. The automobile constitutes a sort of revolution in the series known as transportation. An invention of even greater magnitude was the steam engine, which ushered in the Industrial Revolution.

The type of change most frequently called revolution occurs in the cultural series known as government. That is, the term revolution as generally used refers to a rapid, widespread change in the political organization of a society. Apart from the sudden and extensive political changes, a governmental upheaval may have little social significance, as in certain Latin-American countries where frequent governmental changes have occurred by violent means but without much effect upon other aspects of community organization. Where the social effects of political revolution are more impressive, the revolution usually represents an attempt to adjust a long-standing lag in the political sector. Such a revolution is to be explained in terms of unequal rates of change in correlated parts of culture. A change first

[34] Jerome Davis, *Contemporary Social Movements* (New York: D. Appleton-Century Company, 1930), p. 8 ff.

occurs in the material realm. Owing to changes in the economic organization, for example, wealth concentrates increasingly in the hands of the few, while the condition of the poor grows more and more wretched. There is great unrest among them, accentuated by the communication inventions. Thanks to the latter, it is possible for the oppressed masses in one country to learn about the more favorable conditions of other peoples, and so to become emboldened in their own ambitions. The situation thus calls for some change in the system of control, in order to ease the strain. Owing to the blind resistance of the ruling classes, however, no such changes may be permitted. A situation of this sort may go on for a long time, so that the strain becomes very great.

Widespread misery and oppression, however, do not by themselves cause revolutions. It is necessary also that acute resentment against these conditions be felt by the masses, and moreover that they entertain some hope for substantial betterment.[35] Hence, before revolution can occur, the misery of the people must be exploited by a small group which stands to gain by the change and is willing to furnish the necessary leadership and to use extreme methods to achieve its ends. Also, revolutions of a class nature are more likely to occur if the ruling classes are corrupt or inefficient, so that as vested interests they offer little real resistance. Such were the conditions in France, Russia, and China, preceding revolution in these countries.

It is reported that in all human history no real revolution has developed in less than three generations.[36] That is to say, an enormous lag accumulates, and the political revolution is merely an attempt to effect a long-delayed and substantial adjustment. The degree of violence is in proportion to the amount of maladjustment. It was greater in France than in England, and greater in Russia than in France.[37]

[35] George Soule, *The Coming American Revolution* (New York: The Macmillan Company, 1934).

[36] L. P. Edwards, *The Natural History of Revolution* (Chicago: The University of Chicago Press, 1927), p. 16.

Social Planning

A movement which has recently come into great prominence is that known as social planning. It differs from reform in a number of respects. While reform is remedial and corrective, planning is preventive and constructive. A plan is laid out as an achievement to be made in a certain length of time. The emphasis is on the practical rather than on aspirations of the fantasy type. The various state planning boards have been quite successful in looking into the more immediate future and in planning for such practical considerations as educational facilities, electric power, and flood control.[38] Emphasis has been on the practical side in successful planning. A plan is usually not concerned with eternity or infinity. Furthermore, it does not essay to deal with the whole superorganic, but only with a manageable portion of it.

Planning is inevitable in an age of change. Planning has the virtue of looking ahead, which is essential in a changing society. Unless there is what Comte called "prevision," it is idle even to talk of control. Earlier sociologists, like Spencer, believed control was neither possible nor desirable.[39] Spencer taught that the social heritage grows according to fixed, ineluctable laws and that interference usually makes things worse. Comte, on the contrary, believed that man had the power to look ahead and to control

[37] See H. M. Hyndman, *The Evolution of Revolution* (New York: Boni and Liveright, 1921).

[38] See National Resources Board, *State Planning: Review of Activities and Progress* (Washington, D.C.: Government Printing Office, 1935).

[39] Herbert Spencer, *First Principles* (New York: D. Appleton and Company, 1878); and especially *Man Versus the State* (D. Appleton and Company, 1888).

his destiny.[40] Later this idea was brilliantly developed by Ward,[41] who used the phrase, "social telesis," meaning societal self-direction. Although Ward was unduly impressed with man's intellectual powers and exaggerated greatly the amount of control possible, he nevertheless did perform a valuable service in stressing the possibility and importance of looking and planning ahead.

The greatest pitfall of planning is wishful thinking. The earliest plans were a bit Utopian, and were the result of daydreams. There is no objection to setting goals for our wishes; it is rather that wishful thinking is likely to lead to impractical methods. To minimize this difficulty, a good plan, when possible, is to project existing trends into the future, just as if no planning were contemplated. After this has been done, we may see to what extent we can modify the trends. Thus in any plans to disperse the population of big cities against possible attacks by atom bombs, it is desirable to project net trends of population and industry outward from the city center, if there be any. We then have a more practical basis for inquiry into what can be done to speed the movement.

Another very good practical safeguard against egotistical optimism in planning is always to consider the probable effect that new inventions may have on the plans being proposed. Thus metropolitan plans should now be made only after full consideration of the helicopter and the effect it may have upon population distribution.

Of course, it would be good to know all the very long-time trends, but in our ignorance it is possible to act with a vision that extends only for a few hundred years, or for just the lifetime of our grandchildren, or in some cases even only for a score of years. The further a trend line is extended forward into the unknown, the more inaccurate the forecast. In fact, a great extension is usually worthless. It may be wise to establish parks and playgrounds in a certain section of the city even if we do not know whether the city will be in existence ten thousand years hence or what the distribution of the population will then be. The Rockefeller Foundation refuses to dictate the disposal of their gifts forever, claiming they do not know that what is good now will be desirable fifty years from now. The story is told of a man from New York who went west in the middle of the last century to stake out a claim. He was befriended in a western town, where he found himself badly in need of sustenance. Later, when success came to him he established a foundation of money, the interest of which was to be used to befriend homesteaders who became stranded in the western town. But now there are no applicants. Man's vision is too limited to plan for eternity.

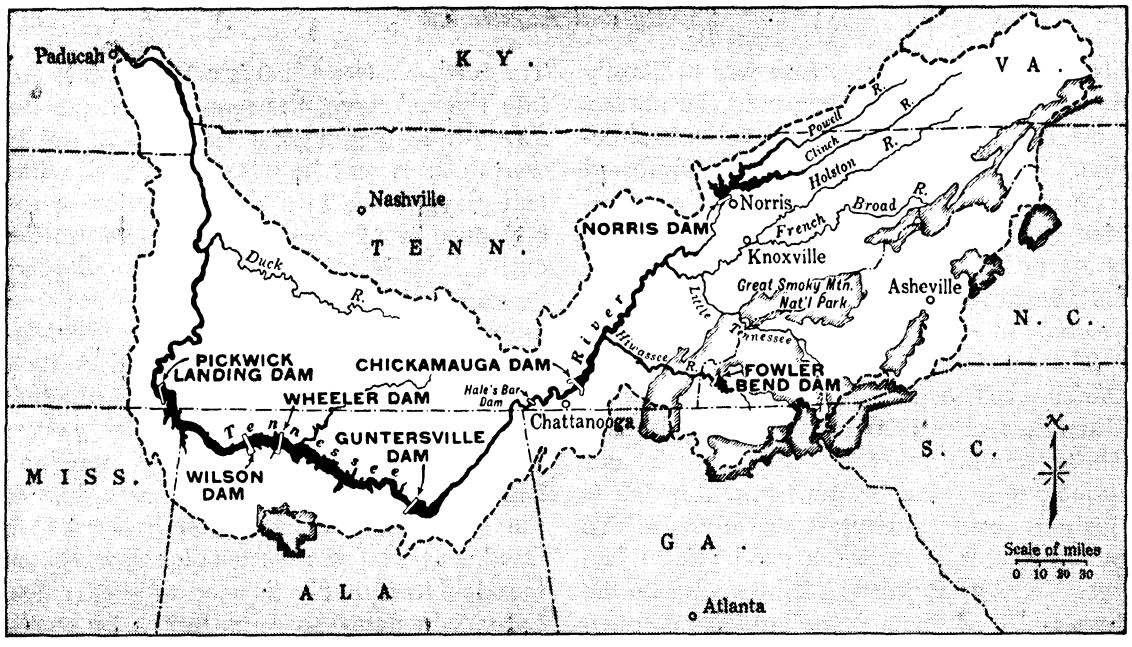
More often than not, however, it is possible to act successfully in accordance with short-time advances. Most social or national policies are framed on this basis. The practicality of long or short policies varies with the problem in hand. In the case of racial stock and eugenics is is desirable to take a longer point of view. The same is true in regard to the natural resources of the earth's surface. But the majority of acts of a city council, for instance, deal with matters where long perspective is not necessary. When we start out on a trip we want to know that we are not wandering aimlessly, but going to destination *A*. We may even know that after this trip we plan to go to destination *B*. But we do not need to know all the succeeding trips for the rest of our lives.

Experience with planning in recent years enables us to see some of the difficulties.[42]

[40] Auguste Comte, *Positive Philosophy* (London: Trübner and Company, 1875–90), Martineau translation, Volume II, p. 73.

[41] Lester F. Ward, *Applied Sociology* (Boston: Ginn and Company, 1906); also *Dynamic Sociology* (New York: D. Appleton and Company, 1898).

[42] Findlay MacKenzie (ed.), *Planned Society, Yesterday, Today, Tomorrow* (New York: Prentice-



298 The Tennessee Valley

The T.V.A. is one of the largest plans of a regional nature that has yet been undertaken. It not only conserves water supply and affords electric power for seven states, but it also presents one of the most extensive plans that we have for agriculture and the building of a great recreation area. The conservation of natural resources is one of the first and most necessary of many plans. (From W. B. Guitteau and E. McC. Bohlman, *Our Government Today*, Boston, Houghton Mifflin Company, 1938, p. 523.)

The Five-Year Plan in Russia was in large part an achievement in the industrialization of the country. Planning boards probably deal more or less successfully with material situations of not too comprehensive scope, where measurement is possible. As Keller [43] expresses it, "In this field the means are as readily susceptible of test as the ends are definite and concrete, and so there is some hope of attaining solid and lasting results." To plan in regard to some social organization like Communism or Fascism is difficult because they involve highly emotional material about which opinion is divided. Controversial social questions are not planned for very successfully.

Furthermore, to carry out a plan successfully often requires a high degree of organization, as in the case of the army. A high degree of organization means discipline and loss of liberty. Hence planning is opposed by those who lean toward *laissez-faire* as a social policy. "Democratic parliamentary government cannot plan, it can merely improvise," [44] unless it is willing to delegate considerable authority to the executive. Concentration of authority is needed for the successful formulation and prosecution of a plan. Otherwise the program is likely to be subject to fluctuations and modifications as the result, for instance, of the pressure of interests that are powerful and that stand to lose by the new program. A great change in

Hall, Inc., 1937), Part III, "Control and Planning in Particular Areas of Economic Activity." For a comprehensive bibliography of the subject, see pp. 939–978.

[43] A. G. Keller, *Societal Evolution* (New York: The Macmillan Company, 1915), p. 167.

[44] Sir Arthur Salter, *The Framework of an Ordered Society* (New York: The Macmillan Company, 1933).

a heterogeneous society such as ours is certain to be inimical to the interests of some established groups, no matter how beneficial it may be for the people as a whole.

Despite this and other opposition, however, the planning movement has been gaining ground. Planning of an economic type has been quite successful in relatively underdeveloped countries, such as Russia, India, and China. It is likely to be tried in still others. Development under *laissez-faire* in these countries is slower. Thus in India in the governmental sector of the economy the five-year plans proceed faster than in the private sector. Also there is need for the importation of many new culture traits, particularly technological ones. Their importation can be better organized under central direction. Furthermore, the government finds it less difficult, though troublesome enough, to raise capital to buy the new inventions than to induce outside interests to invest capital in the country, especially when the government does not wish to surrender any of its sovereignty.

Table 43 presents some of the targets of the current five-year plans in India and China. It can be seen that the plans set goals in quantities for definite dates, and thus their progress can be measured from year to year. China's plan calls for increases in producers' goods of about twice those of India. In consumers' goods the planned increases are about the same. India's first five-year plan emphasized consumers' goods more than producers' goods.

Planning is likely to develop in many different sectors of the advancing superorganic, which after all is very complex. Practical plans are likely to be many and heterogeneous, and deal with manageable problems of a near future. While concern with ultimate goals for the whole of civilization continues, the practical work will go forward in many areas from day to day, with efforts to plan a little ahead for the particular problem. There will be plans that are not in line; and movements will develop for coordination, which will be greatly needed. There then will be a swing of emphasis to progress on the grand scale, to be followed in turn by a demand for a more specific practical plan. The whole process will thus go forward, and, if success follows, perhaps practical plans in the years to come will be more comprehensive and better integrated than it is possible for them to be at the present time.

Table 43 · Targets of Five-Year Plans in India and China*

SELECTED ITEMS	INDIA		CHINA	
	1955–56†	Per Cent Increase	1957†	Per Cent Increase
Finished steel (thousands of tons)	1,650	69	1,851	150
Coal (millions of tons)	39	18	113	78
Cement (millions of tons)	4.8	78	6	107
Electric power (millions of KW)	3.5	52	15.9	120
Paper (thousands of tons)	200	75	650	75
Grains (millions of tons)	61.6	17	192.8	17.6
Cotton (thousands of tons)	830	42	1,635	25.4
Sugar (thousands of tons)	1,500	34	686	175

*From Wilfred Malenbaum, "India and China: Development Contrasts," *Eastern Economist Pamphlet*, 1956, p. 18.

†The data are those of the beginning of the plan. Five years are given to hit the targets, except for steel, where the target is for 1957–58.

SUMMARY

The concept of adjustment has occurred frequently in this and previous chapters. This is a key idea in the structure of the book, which is laid out on a grand scale dealing with the origin of the superorganic, the development of civilization, and the evolution of man through the various ice ages of the Pleistocene until the present time. Our inquiries have concerned the adjustment of man to natural environment, adjustments between the natural and cultural environments, and the part groups play in attaining harmony in adjustment. We have seen how the superorganic grew from simple beginnings of the Chellean period to the mighty civilization it has become today. In its magnitude, it is nothing less than a new environment, the whole whirling along through time, but with its parts changing at unequal speeds, thus leading to maladjustments between them.

The question naturally arises of how satisfactory the adjustment is between our inherited biological nature and this great new changing environment, civilization, which only men have. Insanity and neurosis indicate that the adjustment is not as good as we should like it. Yet men are physically bigger and have a lower death rate than ever before.

There also arises the question of an appraisal of our culture in terms of goals other than health and biological welfare. These additional goals may be moral or religious, for instance. The difficulty with such appraisals is that our religious and moral codes vary from age to age. So such appraisals are not based on standards that abide through space and time. The goal of biological welfare, on the contrary, because of the stability of biological man, may well afford us a long-time goal.

Though it may be difficult to set goals for progress for all time, progress being a moral valuation of change, we can, even with our restricted vision, appraise movements toward a limited number of specific goals about which there is general agreement for some distance into the future, such as less crime and better education.

Even if we can agree on goals, the problem of what we can do about them still remains. The idea that a tremendous development like the superorganic can be controlled or even directed is a fantasy. Such dreams are incompatible with a scientific sociology. Even theory in science must be relevant to the data.

Though man is not the master of his civilization, he can, practically, modify parts of it here and there. Thus, through human effort the death rate from diphtheria has been made negligible, as we have seen. There are social movements for other ends, too; many of them being in modern times efforts to adjust lagging social organizations to preceding technological changes. Practically, a group of people, like a single person, can make choices and exercise will power. But usually the range in which there is a practicable "freedom of the will" is rather narrow, and many of our choices are but illusions since the evidence is clear that they are determined.

Social efforts are now being "planned"; and planning has now come to mean making realizable plans. The future for planning appears assured since in a changing culture we wish at least to anticipate what changes will occur and how we may adjust to them, as well as to achieve certain desirable ends.

For our time many such plans will be concerned with adjustment to changes caused by technology and discoveries in applied science. These changes constitute a challenge to the social sciences. Insofar as scientific knowledge of man, society, and culture develops, and is applied to the problems caused by social changes, planning in these sectors will be successful, and we shall increasingly achieve the harmonious social adjustment for which we strive.

QUESTIONS FOR DISCUSSION

1. Does the fact that man has evolved from lower orders mean he has progressed? Are evolution and progress synonymous?
2. Does the history of the United States show progress in technology? In art? In business organization? In morality?
3. Why do we venerate our leaders so highly?
4. What are some innovations that the President of the United States could not possibly succeed in introducing at the present time even if he wished to do so?
5. What possibilities for control over biological man does the eugenics program offer today?
6. Is it possible for man to control the course of civilization? What would be involved in such control?
7. What inventions of recent times may be regarded as revolutionary in their effects?
8. What planning projects have been projected in your community? What are their prospects for success?
9. "The practical need, then, is not so much for control over the basic processes of change as it is for control over the focal points of strain which these processes produce." Illustrate.

TOPICS FOR REPORTS

1. Varying concepts of progress existing in different eras.
2. The problem of the control of the atom bomb.
3. Social planning in Mexico.
4. Social planning and the T.V.A.
5. The process of reform as illustrated by the history of the treatment of the mentally disordered.
6. The relation of leadership and the social situation.
7. The social philosophy of the inventors of the mechanical cotton-picker.
8. The revolutionary cycle exemplified by the Russian revolution.
9. The development of the concept of social planning.

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