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Human Relations in Supervision

LEADERSHIP IN MANAGEMENT

Human Relations in Supervision

LEADERSHIP IN MANAGEMENT

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McGRAW-HILL BOOK COMPANY, INC.

NEW YORK TORONTO LONDON

1951

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Preface

Good human relations, whether in industry or in business, in the home or in the shop, is a goal toward which all of us must aim. Not that it is a new goal; but today, more than ever before, there is an awareness that the human factors in all our endeavors and pursuits overshadow technical achievement. We shall, of course, continue to make improvements through better machines and materials, but the great advances in morale and production of the future will come through better supervision and understanding of the human side. Good human relations can and should become a way of life, a philosophy of action. This book has been written with this thought constantly in mind.

Industrial strife and unrest are both unnecessary and avoidable. The application of the presently known principles of human behavior to the understanding of the individual and groups can and will serve to reduce and ultimately banish the tragic conflicts that exist today, not only in commerce and industry, but also in international relations.

In this book we present to the first-line supervisor, be he foreman or office manager, and to higher levels of management too, principles, illustrations, and directions for the development of a sound human-relations program. The book is directed specifically to the first-line supervisor, because the establishment of good human relations in any organization stands or falls upon the skill of these supervisors in dealing with human problems. He must be

staunchly backed and upheld by all other members of the management team.

In this book, we have tried to represent accurately modern principles of management and the findings of psychology, and we have tried to present them in a practical and readable way. The basic scientific theories are presented along with examples and illustrations of their correct use in the supervisor's daily work. Always we asked ourselves the question: "Will the supervisor understand and appreciate the importance of the point being made?" We have simplified as much as was possible. We hope our effort is both readable and informative.

We are especially indebted to Ann B. Parker for her capable assistance in editing and preparing the manuscript and for her excellent suggestions and criticisms of the material. We wish to thank Lyla B. Kleemeier for her editorial review and Juanita T. Lynch for her work in typing the manuscript.

We are grateful to the International Harvester Company for permission, through its Public Relations and Customer Relations Departments, to use many of the pictures in this volume. Our thanks go particularly to William J. Pollard of that company for his courtesy in allowing us to reproduce the training skit, "O Would Some Power." We are also indebted to all the publishers and authors who generously gave permission to reprint quotations.

We dedicate this book to the old "Bull of the Woods" whose ignorance of sound human relations caused us to write this book. May he forever rest in peace.

CHICAGO, ILLINOIS
ORANGE PARK, FLORIDA
September, 1951

WILLARD E. PARKER
ROBERT W. KLEEMEIER

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ONE

Management Discovers Men

"He stood there just muttering and staring at me after I told him what to do. So I hit him on the jaw. He knew who was boss now. He picked himself up and walked back to his job laying tracks. Just then a fellow I'd never seen before tapped me on the shoulder.

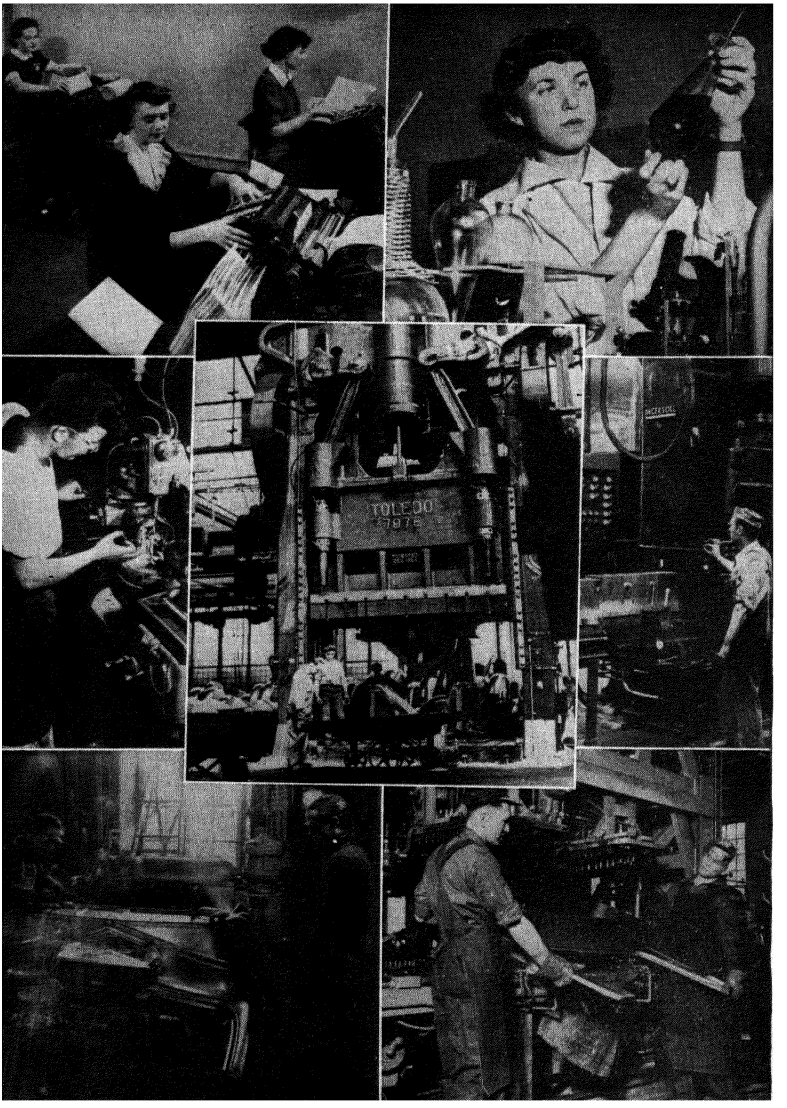
" 'Pretty handy with your fists, aren't you?' he said.

" 'Yeah, why? Want to make something of it?'

" 'Plenty, but not what you think. I like the way you manage your men. I saw how you got that fellow back to his work. My company can use a man like you as a foreman. How about coming across the street to my office and talking it over?'

"And that, believe it or not, is how I got my first job here as a foreman forty years ago."

Tom Hartley told that story at the banquet given when he retired as works manager of one of the nation's largest manufacturing concerns. In those forty years he had risen from foreman to works manager. Scores of the company's employees from president to laborers testified to Tom's leadership qualities and told how he had developed men through his understanding treatment and example. He had changed in those forty years from a driver to a real leader of men. His story illustrates the change for the better in supervisory methods in the past generation.



Workers are more important than machines and equipment. Without the intelligence of the operators, without good employee morale, production will be limited even though your equipment is modern and efficient.

THE HUMANIZING REVOLUTION

There has been a real upheaval in industry that has nothing to do with machines and materials. It is a reversal in the supervisor's attitude toward his workers. When Tom started as a foreman, everyone believed that workers had to be bullied, to be dominated by fear and physical force. But now we know that if you want to get the best effort out of your men, you must treat them with respect. We now know that friendliness and mutual confidence between boss and worker bring maximum production.

Your machines may be modern and efficient, the wonders of the technical world, but the men who operate them are more important. Without their cooperative interest, without good employee morale, production will be limited.

These days we often hear managers moan that "it's too late to do anything about improving labor relations; labor unions have us by the throat." Is labor's present upsurge of power something that happened overnight? That is what plenty of us think, because we don't understand why it happened.

Foremen and supervisors are sometimes surprised to learn that some of their men are afraid of them. They wonder why new workers are nervous and jittery every time the boss comes their way. They know nothing about themselves which might inspire fear; after all, they don't behave like the old "Bull of the Woods" of a generation past. Why is it, then, that so many workers resent or even fear their supervisors?

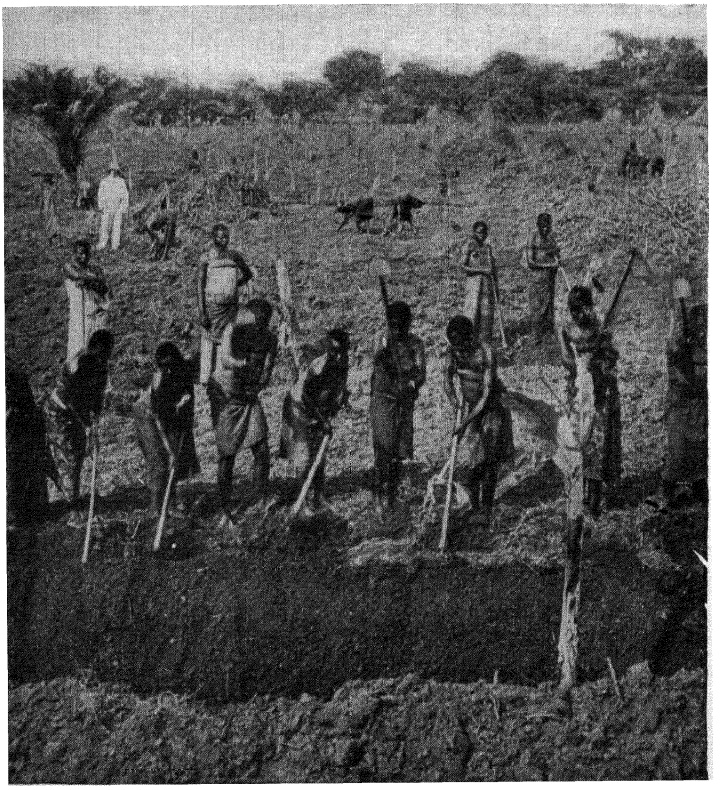
Historical Background

The reasons for the immense surge of labor's power and union aggression, the reason the worker feared his foreman, can be found in history. Let's take a quick look at labor relations over the centuries and see what manner of man it was who was the

forerunner of the supervisor of today. Who were the foremen of ages past, and what traditions have been built up by them which you have inherited?

Thousands of Years of Slavery

The very first written records we have of ancient Egypt and Assyria—picture writing 5,000 years old on the walls of the pyramids and on the sun-baked tablets of clay—show us the foreman



Human slavery is the most costly and inefficient kind of labor, because workers are driven by force and fear.

of that day. He is a hulking brute of a man. He carries a spear in one hand and a long whip in the other. Before him slaves cower and toil at backbreaking tasks of hauling immense timbers and stones, or they are sweating and bending at the heavy oar of a galley boat. The boss, the foreman of that day, enforces his orders with a lash of the whip. Insubordination is dealt with by a thrust of the spear. The supervisor has the authority of life or death, and death on the spot was common punishment for his displeasure. His tools of supervision were terror, brute force, and death—not exactly the kind of incentives that breed good employee relations. Even today slavery is not entirely wiped out, as a peep behind the iron curtain of Siberia or an investigation of parts of the Congo would reveal. Indeed, we might note in passing that it is less than a century since slavery was outlawed in our own country.

The Serf and Feudalism

Now, let's jump a few thousand years into the period of the Middle Ages, say to about A.D. 800. The lot of the working man had improved a bit, but not too much, over that of the slave. He was called a "serf"; he served the feudal lord or baron, working in his fields as a primitive farm hand, fighting in his armies, and serving under his absolute command. He wasn't sold as was the slave but was transferred with the land if it were sold. He lived in an unsanitary hut and received a meager share of the crops for his backbreaking labor. And who was his immediate supervisor? Again, the brute with the whip. The foreman of that day had the authority to use the whip mercilessly; in fact it was expected of him. What was worse, he could, and often did, send the serf to the dungeon for torture, starvation, or even death. There is little in the overseer-worker relationship through the many centuries of feudalism which might be expected to engender confidence and friendly relations between the worker and his boss.

Early Unions—the Craft Guilds

The history of labor relations slowly unfolds and more slowly shows improvement. There has been a tedious but unresistible change for better conditions. It is interesting to note that even during this dark period of feudalism there flowered for a limited number of workers one of the happiest relationships that has ever existed between supervisor and worker. Some of the serfs and later some of the free men, probably the more intelligent ones, became highly skilled in working with iron, wood, leather, gold, and silver. The work of these master craftsmen was highly valued by their superiors. Generally they were given better treatment and were sometimes permitted to leave the estate to work with other craftsmen so that they might learn more secrets of other blacksmiths, silversmiths, wood carvers, and cobblers. These ancient master craftsmen were thus able to band together and set up crude organizations known as "guilds," which are the forerunners of our modern unions. Thus we see that the tendency for workers to organize to gain rights and improve their living conditions is not new. Unions are at least 1,200 years old. The old master craftsmen took as apprentices their own sons or friends. And while the apprentice toiled long hours to learn his trade, he was usually treated much better than was the ordinary serf or hired worker. He lived in the same hut with his master and ate at his table; after eight to ten years he might himself become a journeyman or master craftsman with the rights and privileges so painfully gained by the guilds.

Free Enterprise and Factories

Slow progress and very gradual step-by-step improvements in the workers' conditions tell the story for the next several centuries. As the government of nations became more enlightened, the working man fared somewhat better. Laws were passed giving him

more basic rights. He was paid for his services, but while he could not be sold as property, he was still looked upon as a commodity. Labor was thought of as material, like wood and stone, to be purchased at the lowest rate and junked at the pleasure of management. The working man wasn't thought of as a person with feelings. His services were cheap to buy; and thousands of others were waiting to take his job when he dropped from exhaustion, starvation, or disease.

The next great change in working conditions coincides with the invention of the steam engine. Late in the eighteenth century when John Watt produced the first cumbersome steam engine, he introduced an industrial revolution, bringing with it the first factories. For the first time, human and animal muscle power were replaced by mechanical power; only the very wealthy could afford to buy these crude engines. Workers toiled for 16 or 18 hours a day, and records prove that women and even children were sometimes chained to the looms and other machines. Many overseers of that day still carried the whip or a stout cane with which they beat the sleepy workers. Sanitary conditions were unbelievably bad, and wages were so low that the workers could buy only the barest necessities to sustain life. Plagues and disease killed them by the hundreds of thousands. The foreman of that early factory wasn't a builder of team work or loyalty; he was feared and hated because he was the symbol of power and cruelty.

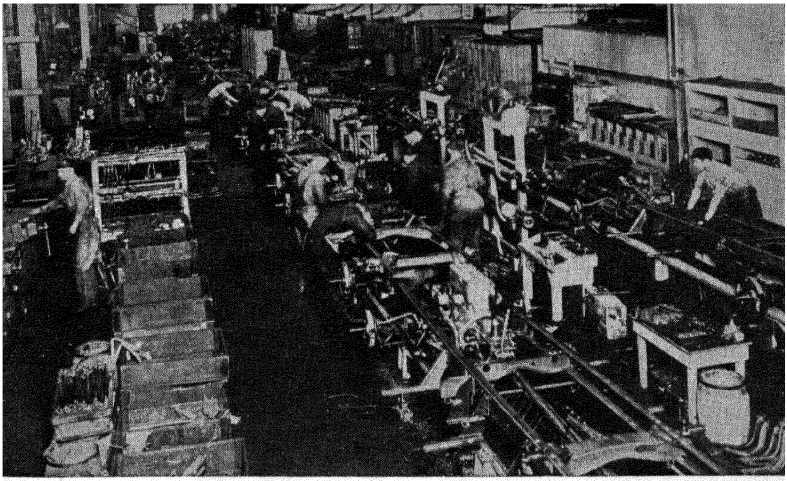
As the years moved on, employees gained further rights. With the coming of free enterprise and democratic ideas in government, workers achieved greater freedom; no longer were they thrown into prison for small debts or forced into jobs against their will. The use of physical force by the supervisor to enforce his orders was rare. True, he might knock his workers around a bit with a right to the chin or a stout kick, but usually he enforced his wishes by firing the worker. Sometimes the expelled worker was blacklisted with all the other firms in the community so that

he was unable to get a job anywhere. Or the foreman might resort to loud public reprimand, sarcasm or ridicule, forms of humiliation usually harder to bear than physical punishment.

Mass Production

Over the years the skills of the craftsmen had increased. It was indeed a mark of distinction, which brought considerable economic benefits and pride, to become a journeyman or a master machinist, electrician, or carpenter. Such skilled workers naturally took pride in their handicraft. They could and did perform all the operations of their craft; they completed the whole job. They could see the result of their skill; the contributions which they made were rewarding in themselves. All men like to feel the pride of accomplishment, to know that their work is good and worth while. But when Henry Ford, Sr., introduced assembly lines, mass production in industry "deskilled" many of the existing jobs. Long before Ford, Eli Whitney had originated the idea of standardized replaceable parts in the manufacture of guns and clocks, but it remained for Ford to apply these ideas in a big way. So now we see many of the all-round craftsmen replaced by semiskilled workers on assembly lines, who do only one small part of the total job, repeating over and over again some simple and usually monotonous operation as they fit a part to the growing machine as it passes down the line. No longer does the employee swell with pride as he sees the finished article that he alone built. His work is tedious, repetitive, and often boring. He is called a "hand" and is referred to by a clock number. There is little dignity or prestige surrounding his job, and often his boss has not much individual human consideration for him.

We do not mean, of course, that high degrees of skill are no longer required of workers or that there are no jobs in which the worker can experience the thrill of accomplishment. Far from it, for many jobs require consummate skill and give great feelings



With its assembly lines, mass production robbed many workers of their satisfaction in doing the whole job and their pride in personally creating things.

of accomplishment. Still, there has been a steady decrease in the proportion of skilled jobs in the working force, even though, as the work force grows in size, there has been an increase in the *absolute* number of skilled jobs.

Enter—the Leader. Exit—the Driver

To some extent all these conditions from slavery to mass production exist today. Many democratic ideas on the rights of the individual have now become law. Unions have become powerful and have helped to force reforms. Forty years ago only 7 of every 100 people of high school age attended high school; today in the United States 75 of every 100 of that age are in high school—an increase of 10½ times. More workers are better educated and will not tolerate inhuman conditions. Competition for able workers is keener, the labor market is tighter, and jobs are ordinarily easier to find. But the primary cause for improvement is none of these things, nor is it even found in the desire of management in general to be kind and benevolent to its workers. The chief reason is that management has at long last discovered that there is greater production, and hence greater profit, when workers are satisfied with their jobs. Improve the morale of a company and you improve production.

It is true that even during the darkest periods a few owners and managers treated their workers with respect and consideration, but the sordid history points them out as exceptions. The whole philosophy of supervision until very recently has been *force* and *fear*. Managers, being men themselves, thought they knew all the answers to the problems of supervision and what was in the minds of the workers. Most of them felt that a few *rule-of-thumb* methods were enough for any supervisor to get out production. It has taken thousands of years to learn that men who are stimulated by an interest in their work always produce more. Centuries have been required for nations as well as management to learn the

lesson of democracy: that individuals have rights and feelings and that they can be motivated to contribute their ability wholeheartedly only through leadership, never by force. In view of this background, it is little wonder that some workers still fear the foreman and are nervous when he approaches. Small wonder either that we have some militant labor unions and labor leaders who think that violence and strikes and a show of power are the only ways to gain their ends.

Democratic Trends

There have been vicious abuses by both management and workers through the ages. There is a surprising parallel between the history of nations and the history of industrial relations. Both have seen dictators and tyrants; both have had revolutions and uprisings of the common man. Managers of companies, like monarchs of countries, have ruled with an iron hand, forcing the helpless rank and file into subjection and misery. Is it any wonder, then, that some labor leaders have gone too far when they could wield the power? It has taken many centuries for nations to learn that men are best ruled by democratic methods, that citizens have the rights of freedom and the right to live out their lives in peace as long as they obey their self-made laws, and that they will respond to a government in which they can participate and have a voice. Exactly the same trends have taken place in industry, but we still have some dictators in labor and industry.

Warfare or Welfare?

Strikes, industrial unrest, hatred and resentment between management and workers today are totally unnecessary. This is the belief of nearly all experts who have really studied the forces and factors which cause the turmoil. The gulf of misunderstanding between management and workers should not exist. The gulf is inexcusable, because we have the knowledge and tools to bridge

it. The bitter differences between supervisors and employees have existed since men first worked for other men. In many companies, labor and management act like two hostile armies, each ready to attack and destroy the other at the first show of weakness. In view of our present knowledge of human behavior, such conditions are intolerable. The troubles, which bring misery to both parties and to the public, can be healed. This has been demonstrated and proved in many progressive companies where management and workers have had the intelligence to seek out the causes of their difficulties and to work forthrightly together to eliminate them.

Management and employees are human beings, human beings whose actions are governed by the same forces and principles. To achieve harmony in any organization, it follows that first we must have a working understanding of the basic principles of human behavior, and then we must all work together sincerely and conscientiously to apply these principles.

Since management assumes the position of leadership, it must take the lead in bringing about the necessary changes. For most managers and supervisors this will mean a fundamental change in attitudes as well as actions. They must cast away many of the timeworn ideas of supervising men. The ancient idea that the employer is the master and the employee the servant has no place in a modern democracy. Many an employer in an industrial dispute still shows an appalling ignorance of the real reasons behind the union's acts. He sees "reds" and "anarchists" in every strike and obstinately refuses to analyze calmly the real causes of the trouble. He stills his conscience by blaming the unrest of his employees on the actions of outside agitators. His attitude is that management can do no wrong. He underrates the intelligence and integrity of the employees and their leaders. Some employers have not yet learned that the day of the driver is over and that workers will not willingly respond to fear and force. These em-

ployers should know that bullying always causes resentment, or worse, which invariably lowers production, and that only through real leadership, which encourages participation with management, can they earn the loyalty of the workers and thus motivate them to greater productivity.

Improving Human Relations

The more progressive companies have learned that the same democratic principles apply to employees on the job as they do to citizens of a country. The same respect for individual freedom, for opportunity to advance, for self-expression, and for a chance to have some say in the management of affairs applies to companies as it does to democracies. The most rapid and far-reaching improvements have taken place in the past two decades. In fact, methods of supervision have changed so rapidly and so radically that we must take time out to study their effects and values. For the ambitious supervisor, these days are the most exciting in all history. We have learned a lot from the mistakes of the past; and we shall learn more from research in industrial psychology, economics, sociology, and the other sciences of men. The great advances of the future will come from the improvement of the human side.

Billions of dollars and countless man-hours of effort have been spent by management to perfect machines and materials, but comparatively little thought and money have been spent on the human side. It is probably no exaggeration to state that in the average factory or office we now get only about one-third of maximum production from workers. Some outstanding companies which have developed excellent human-relations programs have increased their production as much as ten times. This is made possible in large measure by bringing greater job satisfaction to the workers, in other words, through improved morale.

ALL MANAGEMENT TAKES PART

To have a real human-relations program in any company, all members of management must pull together, from the president to the lead man. All must share a common belief in the effectiveness of the Golden Rule. This is to say that sound human relations must be more than a pious statement of company policy or eloquent lip service given in annual reports or company advertising. If the magnificent benefits are to be gained, good human relations must permeate all levels of management. Human relations should be a dynamic, living, breathing philosophy, as much a way of thinking as a set of methods. This implies, then, that all supervisors, on whatever level in a company, must work together consistently. The principles and methods must be understood and, above all, believed in by each level of management. To succeed, an employee-relations program must have the sympathy and cooperation of all levels. So let's take a look at the part which each managerial group must play to bring about this success.

Top Management's Part

Ideally, top management should set the example and constantly seek to improve human relations throughout the company. Executives should take the lead in setting up a sound program because they, the executives, are deeply convinced that a better relationship between workers and management is the only real way to industrial peace. There are several basic attitudes and beliefs which top management should hold if the ideal soil for a good human-relations program is to be cultivated. What are these beliefs? Here are some of them:

1. *Management should feel a definite responsibility to the individual workers* who make up the organization. It should recognize that each one is a human being and that the company has certain responsibilities for his welfare. Progressive companies have re-

flected this vital conviction in published statements of policy. For example, the Hawthorne Works, of the Western Electric Company, has issued to all employees its ten commandments of management. These "commandments" have been vitalized in daily relations with workers and have been very effective in building morale and efficiency. Here they are: [1]

a. To pay all employees adequately for services rendered
b. To maintain reasonable hours of work and safe working conditions
c. To provide continuous employment consistent with business conditions
d. To place employees in the kind of work best suited to their abilities
e. To help each individual to progress in the company's service
f. To aid employees in times of need
g. To encourage thrift
h. To cooperate in social, athletic, and other recreational activities
i. To accord to each employee the right to discuss freely with executives any matters concerning his or her welfare or the company's interest
j. To carry on the daily work in a spirit of friendliness

2. *The company as a social organization has responsibilities to the community* in which it is located as well as to the nation's welfare. In addition to providing goods and services, it has a duty to the peace and welfare of the neighborhood and the country at large.

International Harvester's belief in this fundamental principle stems from its former board chairman, Fowler McCormick, who said in an address to the American Management Association, "I

[1] CLAYTON KIRKPATRICK, Labor's Good Will Goal of Management, reprinted from *Chicago Tribune*, September, 1949.

think we can say that human relations is of paramount importance for two reasons. In the first place, there are more difficulties today in the sector of human relations than in any other sector of management's activities. Secondly, I believe that a great many people in this country sense that the very existence of American industry depends on the success of its human relations. In this country, we have raw material, manufacturing facilities, engineering ability, great scientific institutions—everything we need, seemingly. But if the people of this country do not believe in American industry, American industry will not last.

"We are convinced that we . . . have the glorious opportunity of fulfilling the reasonable expectations of the people, that business should be a constructive and socially minded member of every community and of the nation."

David Levinger, vice-president of Western Electric, in an article from the *Chicago Tribune* shows his attitude in the following words: "A business organization is a social organism. We recognize this and work sincerely to make a friendly environment, providing recognition to the individual and providing an atmosphere in which men and women of all creeds can work together with mutual understanding that they are contributing to the nation's progress."

3. *The day of the master-servant relationship is over.* Workers, like management, have certain basic rights, such as the freedom to join unions and to be represented by them without fear of reprisal; they have the right to be treated with respect as individuals and not to be treated as commodities to be bought and sold. This is really the belief in the brotherhood of man.

General Charles F. H. Johnson, president of Botany Mills, expressed this sentiment well when he addressed the first graduating class of the joint labor-management school conducted by the Textile Workers Union and Botany Mills. He said, "The resentment which once existed between management supervisory forces

and those employees representing the union is giving way to sympathetic realization that there is merit on both sides of an argument, a grievance, or a complaint. . . . It is only when personal prejudices, neglect, and resistance to a proper understanding of the rights of both the individual and management intervene that minor grievances grow into large ones.

". . . Contracts, agreements, technical procedure are all legal documents which are your weapons of offense or defense in times of battle. But human understanding and a due regard for others' rights and for their dignity as human beings are the only weapons which will bring peace and accord to all of us in the long run."

4. *Paternalism doesn't build employee good will.* In an honest desire to do good for their employees, many company presidents have misunderstood the importance of this. They have given the employees hospitals, fine food in modern cafeterias, excellent recreation facilities, liberal pension plans, and dozens of other fine things. But they have handed it to them on a silver platter. They are hurt and surprised to find that these fine gifts don't bring gratitude but, instead, often breed resentment. Treat them like children and you get childishness in return! Paternalistic managers fail to understand that workers don't want charity, that what they do want is the right to help to develop plans and the right to participate with management in the activities which directly concern them.

A certain charitably minded company president built a beautiful camp in the mountains for his employees so that they and their families could have vacations at a very low cost. The camp was equipped with a swimming pool, gym, tennis courts, and the other trimmings which should, the president thought, bring joy and health and good morale to all his workers. The announcement of the new camp was received enthusiastically by the employees. You can imagine their chagrin when it was followed by a list posted on the bulletin board dictating the time each person

and his family was to go to the camp. This caused some irritation, but it was nothing compared to the antagonism that spread through the camp when the first group at the camp were awakened the first morning by a bugle calling them to group exercises, followed by one hour of prayers and company songs. The other employees refused to go to the camp. They liked the idea of a camp for their vacations, but they weren't going to be forced into going at a special time or, on arrival, adhering to a rigid schedule. The sad affair had a happy ending, though, because a wise counselor persuaded the president to set up a board of directors for the camp, on which several workers served. The employees liked the camp when they were allowed some say in its planning and management.

Another well-intentioned business tycoon noticed that his overworked executives had little time for exercise and recreation. On a benevolent impulse he bought a fine stable of saddle horses. Then he posted a schedule naming the time when each executive should ride each morning before he came to the office. To top it off, he required each one to canter past his home while he stood behind the draperies and checked them off as they rode by. And woe to the poor man who didn't ride by!

Maybe we are hoping for too much to have all top management believe in all these things. Like most ideals they are seldom accomplished. There remains, however, one fundamental conviction which top management must have, or no sound human relations program can be successful. Top management must sincerely believe that the best way to increase production is to improve the workers' job satisfaction. Executives must recognize that the attitudes of workers toward the boss and company spell the difference between poor and greater production. They must encourage all members of management to use the methods which improve morale and must back them up in all their efforts in making this a living policy for the company. Hundreds of firms have proved

that the best way to greater profits is through more intelligent dealings with the workers. Selfish though this motive may be, if top management has come to understand how effective sound human relations can be, the plan can succeed.

Middle Management's Role

How can the superintendents, the division chiefs, and other members of middle management cooperate to build better human relations? The middle managers as a group hold the controls in a number of ways. It is within their power to pass down in practice the ideas and policies of the top executives. They can back up the foreman and help him as he performs the main job of building wholesome workers' attitudes, or they can block him and ruin the whole program. This points up their great contribution. They are the link between first-line supervision and top management; as such they can interpret and communicate executive policies, and they can, and should, train and assist the foreman in all of his operations. They can give up a measure of their cherished authority so that the lower level supervisors have freedom to act. They can encourage foremen to take more initiative in interpreting company policies, and so prevent and solve grievances. In short, they can delegate more of their power to the sergeant on the firing line, the *foreman*. They can assist him with advice and counsel and with their expert knowledge of the technical phases of production.

Middle management sometimes acts as a dam or filter of authority. By the time each level of supervision has taken out its small share of authority from an order as it comes down from the executives, there is little authority left for the first-line supervisor to use; and he is the fellow who needs it with the workers. Consequently, some of these farsighted companies are giving these first-line supervisors much more power to deal with personnel affairs and are assigning to middle management and staff the

problems of production scheduling, machines, materials, engineering, etc. The line supervisor is then empowered to interpret and act on company policy directly with the worker. If he is unable to resolve a personnel problem, he is expected to go directly to the plant manager for assistance and counsel. Certainly this adds greatly to the supervisor's prestige, but it also gives him a feeling of being more definitely an important part of management.

We have said that middle management can make or break the program. It is toward middle management that the line supervisor's bitterest comments are directed. One often hears a foreman complain, "Yeah, I want to be human to the workers, but my boss won't let me. He won't let me take the time to find the real cause of the trouble; I gotta let 'em have it." These same supervisors complain that it is impossible to get their ideas up to top management, because middle management passes along only what it believes the executives want to hear. And the foremen think they are left out and by-passed by the boys in the middle. If this is a valid criticism, perhaps it is understandable when we see the spot middle management is on. They have great pressure from above to increase production and cut costs. They are often frustrated by poor results from their subordinates. Some of them are insecure, because they compete with each other for promotions to the few jobs on top. Others have never known any other model except the driver and still sincerely believe that the only way to get work out of men is to push them around. Top management would do well before beginning any extensive new plan of human relations to make sure that middle management is sold on it. At least, they must be certain they will not block it.

First-line Supervisors Must Carry the Ball

Wholesome human relations means sound, loyal attitudes of workers toward their jobs, their bosses, and the company. In other words, it means job satisfaction. The foreman is the most im-

portant member of the management team. He, more than anyone else, can change workers' attitudes. And by the foreman we mean the assistant foreman and the general foreman, too. They are the men closest to the workers. Every day each foreman rubs elbows dozens of times with the employees. What he says and what he does represents company policy to the workers. In their eyes he *is* the company. They don't see the works manager or the assistant superintendent every day, but the foreman is always with them. On this relationship between foreman and worker depend most of the attitudes toward the company. The company is just the long shadow of the first-line supervisor. The foreman in the plant, like the manager in the office, is the key man in nearly all human relations. He is the one who, more than any other, can prevent grievances or can solve them before they become major problems. Through his prestige with employees, he gets the job done and builds loyalty for the company. He is the true leader of business and industry. It is for that reason that most of the ideas and methods of this book are directed toward this first-line supervisor. We believe that if he practices the principles which we know motivate men, the many wonderful benefits to all through job satisfaction will be attained.

How the Modern Foreman's Job Has Changed

A survey recently made by one of the authors points out the changing aspects of the foreman's job and what foremen now consider most important. Three thousand experienced manufacturing foremen were asked to list in order of importance the elements of their work which they believed most essential to success as a foreman. Over 90 per cent of them stated that being a leader and building morale and teamwork was most essential. A few, about 3 per cent, still felt that being the most skilled mechanic was most important. Obviously there has been a shift in values in recent years.

We see from this survey how greatly the foreman's job has changed recently. No longer is he expected to be the best master mechanic of the department. And, of course, not the tough, old-time bruiser. The modern foreman is a leader. He is a specialist in human engineering. Because of his intimate knowledge of his men, and through his close daily relationship with them, he provides the leadership which gets the job done. He is the stimulator, the motivator, the spark plug. Sometimes we still hear an old-timer carp about how soft the modern supervisor has it today. Listen to him say, "When I was a foreman twenty years ago. I had to do the whole job of running the department. I had to hire the men and train them too. I had to maintain the machines and be able to adjust and fix them; and I even had to plan the layout of the department, chase the materials, and set the schedules. I had to keep the records and do some of the accounting. I planned the jobs and got the production out. Now, just look at the job most foremen do today. They really have it easy. They've got a personnel department to recruit and hire the men. The training department breaks them in. The engineering department lays out the equipment and machines, and the maintenance department keeps them rolling. The planning department and the accounting boys pitch in on the records, and the inspectors look after the quality. What a cinch."

There is some truth in what he says, for the foreman's job has greatly changed. He depends on staff men to help him on many of the technical problems that the old-time foreman had to do himself. There is a reason for this change. Top management has at last recognized that the principal job of a good foreman is to *lead men,* to get them to work together as a team. The help the foreman gets from staff men frees him to be the kind of leader he must be in modern industry. Now he has time for the *human element,* the most important factor in production.

BETTER HUMAN RELATIONS PAY OFF

Wallace F. Bennett, president of the National Association of Manufacturers, has declared bluntly that American management has failed to provide workers with the satisfactions that would preserve their faith in the American economic system. He lists these needs as follows: [2]

1. The need of a man to be recognized as a man, to be known and appreciated as a human being
2. The need to achieve—to meet a goal, break a record—and have this achievement recognized
3. The opportunity for growth and self-improvement
4. The need to belong—to be a member of a team, an insider
5. The opportunity to contribute—to have a chance to rise out of himself and do something for somebody else in the course of his job

When Mr. Bennett made this statement, he wasn't thinking of the hundreds of progressive companies which have already met all or part of these needs. When we hear the story of these companies, we are impressed with the sincerity and open-mindedness of their top executives in their dealings with the employees. We find always that they have set up excellent two-way communications, from top management down through all levels of supervision to the workers themselves and back up again. There are no secrets in their operations. In fact, every attempt is made to inform the workers of the problems as well as the progress of the firm. All of them have urged and promoted real participation of the employees in the management of company affairs. They have provided for the individual needs of the workers by recognizing achievement with pay and promotion, by permitting a maximum

[2] *Ibid.*

of self-expression on the job, and with fair and able leadership from all supervisors. They have given every worker an opportunity to be heard, and each worker is treated with respect as a human being. The attitudes of management in these companies is not hostile toward workers or unions. It is, instead, friendly and based on mutual respect and confidence. One is further impressed that in none of these highly successful companies did management hand these benefits to the employees from "on high." There is no paternalism. Instead, the officers of the company have developed their principles and programs with the active participation and support of the workers.

Surveys and reports show the results they have attained. In all of them, the rewards have been phenomenal. Not one of them would consider returning to previous methods. And the gains have been shared by all, not only by management and the workers, but also by the stockholders and the consumers. We know from the great success of such companies that in developing the procedures necessary to worker job satisfaction they find the way to industrial peace. Beyond that we know also that only through practicing better human relations can all parties achieve their goals—job satisfaction, higher pay, greater profits, increased production, and lower costs and prices. The success stories of the many companies which have conscientiously practiced such methods are exciting. We read new reports about them every day. Here are some brief accounts of a few of these companies.

Lincoln Electric Company [3]

The Lincoln Electric Company was organized in 1895 on a capital of $250 borrowed money and has since been financed solely by its profits. At present it is one of the largest manufacturers of arc-welding machines and electrodes in the world. James

[3] See James F. Lincoln, "Lincoln's Incentive System," McGraw-Hill Book Company, Inc., New York, 1946.

F. Lincoln, the president, has unbounded faith in the capabilities and possible growth of his employees. Years ago he recognized the importance of the incentives which would bring true satisfaction to his workers. The Lincoln incentive plan probably as well as any in the nation provides for the basic economic needs of all its employees. It began primarily as a piecework payment plan for the work done, which gave adequate rewards for what each worker did with his head as well as with his hands. But the plan satisfied other basic needs too, such as security, fair treatment, participation, etc. All men at Lincoln are advanced on the basis of individual merit, and each is constantly challenged with the opportunity for promotion and higher pay. The plan is a simple one, understood by all workers. Fundamentally, employees earn their own job security through an elected advisory board, and in effect each worker is a partner in the business in that he shares in the company's over-all profits as well as rewards for his own initiative and workable suggestions for improving procedures and cutting costs. The benefits of the Lincoln plan have been enormous. Here are some of them:

1. Since 1921 there has been an 80 per cent reduction in the number of man-hours required to manufacture the arc-welding equipment. This reduction is a result of the short cuts suggested by the workers themselves.
2. Under the system, the productivity for each man in a year has increased from less than $5,000 to $57,000 since 1932. Compare this figure with the $6,100 average productivity per worker per year, which is the best production obtained by another comparable electrical manufacturer.
3. The sales price of a regular model machine has been reduced from $1,500 to $200; yet the consumer receives a better machine for about one-seventh of what he formerly paid.

4. The stockholders have benefited too. The stock has been split ten for one; yet its dividends have averaged over 6 per cent return for each share throughout the years.
5. Today, at Lincoln, the average annual wage plus bonus is more than $6,000, which is double what other employers are paying workers for similar jobs.
6. Employee turnover has almost disappeared.

Under the Lincoln plan, all employees seem to be striving for more efficient methods and seeking ways to cut costs. There has been no labor strife, and there are comparatively few grievances. The attitudes of the employees reflect those of a happy, contented family, confident in their future, enjoying their work and their daily relationships with their bosses. But management gained its goals, also. The company is expanding greatly in size, in new products to be manufactured, and in its financial standing. To quote Mr. Lincoln, "Man has limitless latent abilities which under proper conditions can be enormously developed. The most important job we do is the development of superior individuals—men and women with more skill, more imagination, more capacity, and responsibility."

W. A. Sheaffer Pen Company

This quote from *Time* magazine of February 20, 1950, gives a brief story of some of the results of the Sheaffer plan.

> After 16 years of profit-sharing, W. A. Sheaffer Pen Company's 1,766 workers were used to bonuses. But last week, in the main plant at Fort Madison, Iowa, a notice went up that set men and women dancing among the machines. For the latest quarter, their bonus would total 50 per cent of their pay—by far the biggest in Sheaffer's history, and more than double the previous quarter's.
>
> Next day, brawny . . . Craig Royer Sheaffer, 52-year-old president of the biggest United States pen company, gave stockholders something else to celebrate: The company declared an extra divi-

dend of $1.15 a share on top of its regular quarterly payment of 10 cents. Although the company's twelve-month sales had sagged 10 per cent from $22 million in the previous year, Penman Sheaffer had been able to boost his previous $2.4 million profit by 10 per cent.

The bigger profit was the result of increased efficiency and greater worker productivity, which, said Sheaffer, can be traced back to the company's profit-sharing policy. From a bonus of 4 per cent of wages in 1934, when the system was established, the bonus rose to 25.5 per cent in Sheaffer's current fiscal year (*e.g.*, a worker earning $2,400 a year got $612 extra). Another efficiency incentive: Every worker who suggests a new method or machine for cutting costs also gets one-third of the first year's savings. Frequently, the worker's share may exceed $1,000.

The employees who work in Iowa's four air-conditioned Sheaffer plants have never joined a union, never gone on strike; and their turnover of 3 per cent a year is one-third less than the United States industrial average for last year.

McCormick and Company

The multiple management plan of McCormick and Company, of Baltimore, famous for its spices, has been the model for over 500 companies. It provides for a junior board of directors, a factory board of directors, and a sales board of directors, representing the three basic divisions of the company. All these boards operate under the jurisdiction of the corporation board of directors, elected by stockholders and now called the senior board. The three subordinate boards are made up of men elected by the employees right out of the plant, out of the offices, and from the sales force. They make recommendations to the senior board on everything in the business that interests them. They participate in all phases of the management of the company in creating better ideas on how to operate the business. Some of the results of the plan are startling.

During the first five years of operation, the production increased by more than one-third, without any increase in personnel and with little increase in machinery. During this period the working hours were reduced from 56 hours per week to 40. Absenteeism has almost completely disappeared, and wages are the highest in the area. Job security is assured at McCormick through the guarantee to every regular employee of a full year's work amounting to at least 48 weeks. In 15 years of operation there hasn't been one hour lost because of work stoppage. The morale of the employees is very high.

The attitude of the management toward its employees is clearly shown by Thomas Reid, vice-president in charge of human relations.[4] ". . . We have decided that management should put people first in all the factors that go into producing goods. That may or may not be an unusual recognition of factors, but we personally feel that there should be, for example, the vice-president in charge of human relations, who is on a par in the business with the vice-president in charge of production and the vice-president in charge of sales. In other words, we think that the factor of dealing with people is of such importance to the over-all success of our operation that it should be given equal or even higher recognition by the management than the usual factors of merchandising and production schedules and advertising.

"Now that in essence is simply saying something that everybody knows, that people are more important than buildings and inanimate objects. But unfortunately, over the years, because buildings and machines could be regulated and could be predicted, a science has been built up of developing the things that machines could do and the things that buildings should do, while we still consider the question of dealing with people as an art, in most of business today."

[4] Quoted from a radio broadcast, "America United," over the National Broadcasting Company, March 7, 1948.

Throughout the remainder of this book it is our intention to discuss and explain the ways in which a science of human relations can be developed.

QUESTIONS FOR DISCUSSION

1. In the light of history, has management usually used the most effective methods of supervision? Discuss.
2. How did the early forerunners of unions come into being?
3. Describe working conditions in the first factories in the early days of the Industrial Revolution.
4. How did the introduction of mass-production methods affect the average industrial working man?
5. What is the principal difference in modern management as compared to that of the past?
6. What are the advantages of leading men instead of driving them?
7. Discuss some of the ideas and attitudes on the part of both labor and management which must be changed if we are to have harmony in industry.
8. In what ways has the modern foreman's job changed since the past generation?
9. Discuss the difference between paternalism and participation.
10. List some sound human-relations procedures which have succeeded in a company you know about. Describe the results.

TWO

Improving Two-way Communications

Enlightened management now realizes that in the past it has been lax or indifferent to the opinions of workers. While privately these executives were justifiably proud of their records, most of them zealously guarded as company secrets the facts about the firm, its profits, markets, policies, and problems. It was almost as if they were ashamed of them! This created fertile soil for irresponsible agitators. Through their propaganda and rabble-rousing tactics, these malcontents sowed the seeds of misinformation and dissension. They denounced management as enemies of the workers, as soulless monsters interested only in personal gain. They conspired to destroy loyalties, and actually threatened the existence of the American system of free enterprise.

Business and industry are now aware of their past mistakes and are trying desperately to make up for them. They know now that an informed work force and public are the best guarantee for understanding and preservation of our very ways of living. So we see vast improvements in ways of two-way communications in their companies. Here are examples.

International Harvester Company

Among the companies which have long recognized the importance of informing their employees about the business that

supplies them their livelihood is the International Harvester Company. In 1943, an expanded, modern program of communications was instituted by the company to give workers of all levels in the company current factual news on the essential activities of the organization. Several important premises are the bases of the program:

1. Every employee has the right to know what the company does, how it does it, why it does it, and who benefits from it. The officers of the company recognize that employees have a vital interest in the company, because what it does affects their personal welfare.
2. Employees are more cooperative and efficient if they know how the contribution of their work fits into the products and activities of the company.
3. Workers are intelligent and reasonable people. When they have the same information as management, they will probably reach the same conclusions, provided all parties are sincerely and honestly aware of their responsibilities and do their best to live up to them.

The main channel from top management to the worker in the Harvester communication plan is the immediate supervisor or foreman. Every week he receives a newsletter written by his works manager which keeps him informed on current affairs. These letters bring him up to date on a wide variety of information, for example, plans for expansion, new models, union contract negotiations, possibilities of layoffs, and a host of other subjects in which the employees are vitally interested. These facts and the reasons for them are frankly and honestly presented, even though management may occasionally be obliged to acknowledge its mistakes and shortcomings. The foreman relays this current company information to his men as he makes his rounds. For the supervisor this procedure brings a double benefit. It contributes

In Harvester plants, foremen, as they make the rounds, read the works manager's weekly newsletter to the workers. This keeps the employees informed on current affairs and helps to increase the prestige of foremen as members of management.

to the satisfaction of his workers, and it increases the stature and importance of the foreman and makes it easier for him to gain the cooperation of his workers. During bargaining conferences with unions, Harvester goes so far as to issue regular bulletins on the progress of negotiations. Thus, foremen are usually able to tell their employees what is happening before they can get the information from union sources.

The company also issues a managerial bulletin which summarizes briefly some particularly timely item of company news. These, issued irregularly, are frequently used to scotch false rumors and to explain sudden changes in the demands in collective bargaining; or they may report some unexpected crisis in production or change of system.

The Harvester company is interested in the workers' families

too. A third type of letter is sent to the employees' homes at irregular intervals. These are written with the same frankness and willingness to face controversial matters as the other two. Sometimes these letters are purely factual and informative. At other times, along with the factual content, there is an attempt made to persuade employees to accept a point of view.

Harvester issues a series of magazines to its employees and others. For example, *Today*, a beautifully illustrated bimonthly, contains basic articles on policy, employee welfare, and other topics of long-range interest to the readers.

Caterpillar Tractor Company

Caterpillar, believing in the importance of the foreman in communications, furnishes each supervisor with a complete description of company personnel practices. Loose-leaf binders to which additions can easily be made help keep this information up to date. This comprehensive book serves as a guide to the supervisor in dealing with his crew.

Management news letters sent at frequent but irregular intervals also serve to keep the supervisor informed. Bulletin-board notices are sent first to supervisors in plenty of time to give them advance information.

"Unique" is the only word for the tape-recorded news bulletins which the supervisor hears simply by dialing the two appropriate numbers in the company telephone system. These two numbers are dialed by every member of Caterpillar's management every day. All 1,800 supervisors, officers and foremen, listen in on this recorded message daily.

Crown Zellerbach Corporation [1]

Here is a company which has learned the value of getting information directly to the man who works. Crown Zellerbach uses

[1] See "Causes of Industrial Peace," Case Study No. 1, National Planning Association, Washington, D. C., September, 1948.

the standard procedures, such as distribution to all employees of the annual report, an employee handbook, and a publication called *Partners in Industry.* However, their best results have been derived by using less conventional channels to get attention. The assumption is that employees are not interested in the enterprise unless they know something about it, that no information in which workers might be interested should be concealed from them. Here an aggressive willingness to share is displayed. The company gladly makes data available on such subjects as finances, profits, expansion plans, the outlook for the industry, production processes, and the products and their uses. They have found that to some extent the security, income, and company status of the employee are dependent upon the actions of the company and that, therefore, the employee has an understandable desire to be taken into the confidence of management.

Crown Zellerbach welcomes questions from the workers. They are eager to discuss situations with the employees, as well as to receive facts from them. Management has found that union representatives and foremen are the least artificial and most informal and personal channels of communication. In their normal procedures, information is first given to the foremen and then to the union representatives but, on occasion, simultaneously to both. Mr. Alexander Heron, who is a vice-president, in speaking of the foreman as a channel of communications, says: "We go at this job of seeing to it that the information which the directors have, which the controller has, which the general manager has, finds its way down through this line organization; not through specialists, not through industrial relations experts or public relations experts, but down through the line organization to the superintendent, to the foreman, to the man who works, so that these men may know these things."

The company's *Management Digest* provides the foreman with constant current and specific information. He is also kept up to

date through conferences. The foreman has constant contact with employees, and normally they respect him. The worker's confidence in him is increased by the very fact that he is well informed about the enterprise. The union is also an important channel of communication. Union officers usually know what the employees would like to know about the company better than management does. There is also a tendency for workers to believe what they hear from their elected delegates and to place greater reliance on it. The prestige and status of union leaders are heightened by giving them the information which they can relay to the employees.

Conferences of union shop stewards and company supervisors serve as important links in the chain of communications.

Crown Zellerbach calls the local group under the working foreman and the shop group under the shop steward the "understanding unit." Bigness of the company, with its accompanying complexity, can be offset by a full understanding and discussion

of the enterprise at these levels. Thus, the foreman and shop steward are perhaps the most important links in the chain of communications up and down.

Information in Advance

Crown Zellerbach goes even beyond the practice of providing current information; it has followed the policy of making careful advance preparation for future changes. Each time an expansion program is decided upon, or for that matter when any other vital change affecting the workers is made, the representatives for top management, including the president of the company, visit each mill to explain it to the mill managers and supervisors. The same procedure is followed by the mill managers and supervisors in sending on advance information to the individual workers. Here is an example.[2]

"The company decided recently to make some changes at its West Linn mill in order to meet a new demand for high-quality gloss magazine paper. Some old machines would have to be moved and new ones, demanding different skills, installed. The process of change-over would take quite a substantial period of time.

"As soon as the decision was made by top management, and six months before the change-over would start, the company began talking with the union about it. The nature of the change and the need for it were fully discussed. The parties then began working out the details to minimize any unfavorable effects on the employees involved. Arrangements were made to place all workers whose jobs were eliminated by the withdrawal of the old machines either at other positions with comparable rates of pay or to train them to operate the new equipment. Vacations and training times were scheduled to coincide with the period when the old machines were being replaced. As a result, no one

[2] *Ibid.*, p. 25.

was fired or laid off. A major technological change was achieved with a minimum of friction and with the maximum regard for the sensibilities and security of the employees. The cooperative approach, in what might have been construed as an area of management prerogatives, secured complete worker acceptance where otherwise antagonisms might have been created. The joint process strengthened the bond of employer-union-worker understanding and mutual confidence."

This is an excellent example not only of the best in communication but also of worker participation with management. Preparing a working group for an important procedural change requires delicate skill and tact, careful thinking, full consideration of the possible damaging effects on individuals, and it provides a genuine opportunity for workers to ask questions. Despite the effort and time involved, such advance preparation pays off, for instead of arousing conflicts and unfavorable repercussions, it establishes understanding and cooperation.

Tell Them about It

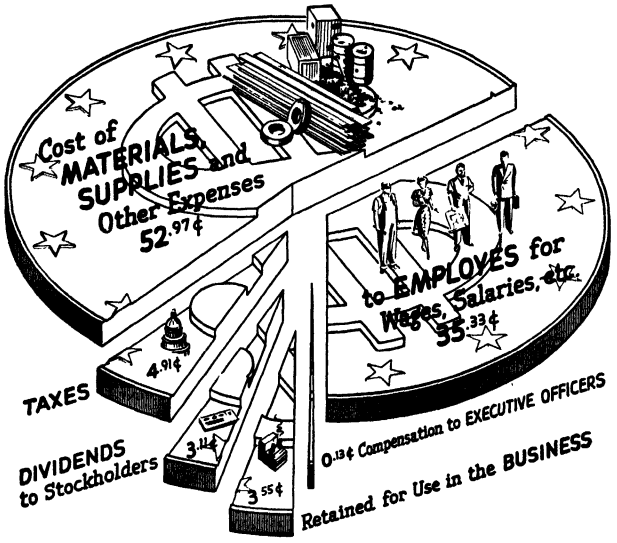
From the communication programs of each of these companies we see that the immediate supervisor is the key man, who more than anyone else in the organization actually gets the information to the man on the job. That is as it should be, for he knows the worker best and can talk his language. Of course, he also has the best opportunity to talk to his men informally every day. There's nothing like firsthand verbal information to dispel false ideas and fantastic rumors which seem constantly to be running riot in most departments. The supervisor can tap the grapevine to learn what is "eating at them," and he can use it also to broadcast facts. But top management can't expect much in good human relations unless it keeps its supervisors "in the know." They must have the facts regularly and hot off the griddle if they are to use them effectively.

"Say, Mitch, did you hear the latest? We're going to have a lot of layoffs, and probably a shutdown next week. The company just lost a big order."

"Yeah, how do you know?"

"Well, my cousin's niece works in the incoming mail department, and she sees a lot of the letters that come in. Yesterday there was a big cancellation. You know what that means. There goes your Thanksgiving turkey and the kids' Christmas too."

Here's a typical one that an alert supervisor can scotch on the spot if he has the facts. Foreman Carey moved right into it. He'd just come from a supervisors' weekly conference with the works manager, who had told them all about the new product they were going to make and the healthy outlook in back orders on hand. Foreman Carey showed the boys his weekly bulletin, and



It is sound management to combat false rumors and propaganda by giving employees the facts about the company. This chart, taken from an annual report, shows the employees just how the company's money is spent.

that not only ended that potential wild rumor but built some security feelings as well.

Two-way Streets

Getting current information from top management to workers is but half of the job. If top management is to formulate effective policies, if the company is going to have a sound human-relations program, all supervisors, and especially the highest executives in the organization, must be constantly and accurately informed on what the employees think and want. We need as direct a pipe line as possible, operating from the bottom level to the top and back again. Workers and unions frequently complain bitterly that top management is not informed about their problems. They say that the executives just cannot be informed, since they are surrounded by yes men who pass on to them only that which they think the executives will want to hear. Or they claim that by the time their problems and complaints filter through six or seven levels of middle management they are all distorted when they finally arrive. We believe that, if it is humanly possible, top executives should have regular meetings and contacts with the workers themselves and that they should use every opportunity to sound them out personally on their views. If such meetings and personal contacts are impracticable because of the vast size of the organization, other safeguards must be provided so that all parties may get the same accurate information promptly.

Middle management can be trained in better ways to collect and pass on the facts. Company and union publications and conferences dispel rumors and misinformation. Employee committees can speak for the workers. Letters from the president to the workers have proved their value. Another way for all levels of management to obtain reliable information is through attitude surveys, which are discussed in detail in Chap. 4.

The day of company secrets is over. The problem of dissemi-

nating sound current facts and information is greater than one of just company morale. It is a problem which must be met in the entire community and in the whole nation, if our cherished free enterprise system is to endure. And the supervisor must carry the message.

QUESTIONS FOR DISCUSSION

1. Why is it important to have two-way communications in a company?
2. What is gained by sending company announcements, news letters, etc., to the homes of the employees?
3. Name several ways by which top management may communicate quickly to sizable groups of workers.
4. How can management work with unions to communicate with employees?
5. What suggestions do you have for bettering communications from worker to top management?
6. Why is it important to foremen to be able to pass on information to workers?
7. Wouldn't it save time and be more effective for top management to communicate directly with union officers rather than through company supervisors? If not, why not?

THREE

The Supervisor Knows His Men

The most obvious thing about people is that they are all different. That means that we can't expect to treat everybody alike and get the same results. Dan Mulliken, a district sales manager of an electrical fixture company, found that out. He issued a written memo to his four salesmen asking them to give him an estimate of potential sales in each territory. What happened? Jerry put it off till the last minute and then submitted a penciled note. Henry submitted a beautifully itemized forecast. Dave pestered Dan five times with questions about things he should have already known, while Dutch didn't make any report at all. That was enough for Dan. The next time he wouldn't give the same instructions to all of them. He would talk to them one at a time and give individual instructions based on what he knew about each of them.

All supervisors have had experiences like Dan's. No matter how much they wish to treat all workers alike, no matter how much they try to be consistent, it is quite impossible; for the fact remains that all workers are different, and the supervisor must take their differences into account in all of his dealings with them. Though this principle of individual differences is basic, we may fail to recognize it in our supervision.

The reason we have supervisors is to get things done through other people. The supervisor can't carry the load himself; he must delegate the jobs and get production through the efforts of others. The supervisor is the leader, and no leader can function without a comprehensive knowledge and understanding of the individuals who work with him. Practically everything a supervisor does or should do is influenced directly by what he knows of his subordinates. He studies their behavior, which is the dynamic expression of their personalities, so that he can work with them and they with him. Lack of confidence or enmity usually stem from the failure of people to understand each other. If you wish to understand the motives and behavior of your employees, it is necessary to know why they act as they do; but to know this, it is necessary to know how they live and what forces have molded their lives and personalities.

Drivers don't believe it is necessary to be well-acquainted with their subordinates. Most of them think that their own hunches are sufficient to manage men. Like most of us, they think they are good judges of others. Usually their judgments are based on narrow prejudices or shallow personal experiences. Their notions of the motives of others are more often wrong than right. Until recently most managers have thought that employees were rather simple creatures whom anybody could supervise. How different is the modern view! Science has taught us that the human being is by far the most complicated and intricate organism that was ever placed on this planet. Compare the working of one man's nervous system, for instance, to that of the most complex mechanical device that we have built, say an atom smasher or perhaps the telephone system for the city of New York. Even with our limited knowledge of human beings, the mechanical device, by comparison, looks like a sand-pile toy. And we are only beginning to learn the facts and mysteries of what makes humans tick. The kind of knowledge about men that supervisors need today to be

Employees aren't one kind of personality during working hours and another after the whistle blows. Modern supervisors try to understand their workers by knowing them well, inside and outside the company.

leaders is not easy to get. We must know men as individuals intimately and well. It isn't enough to know them just from the time they punch in, in the morning, and out, in the afternoon. We must know of their lives outside the shop or office too. Events at home and in their private lives are often the real causes of their behavior in the plant. An employee is all of one piece. He isn't one personality during the working day and another one

after the whistle blows. So we must know the whole man to understand why he acts as he does, and to know how to get him to cooperate.

Yet, even knowing considerable about their outside activities isn't enough. "The child is father to the man" and "as the twig is bent so grows the tree." These sayings mean that the habits of most people were pretty firmly developed by the time they were eight years old; other characteristics have been inherited from their families. If we really want to know our men thoroughly, we must know something of their family backgrounds and their early environments. If you are reasonably familiar with the interests, educational background, childhood experiences, home life, social activities, needs, and attitudes that make a man what he is, then you know what to expect from him, and you can use this understanding wisely in motivating him to use his many abilities. Knowing your men, knowing how each differs from the others, is a fascinating and profitable study.

Pseudo Sciences

Before considering individual differences, let's take a quick look at some of the errors that have been made in judging human behavior. Every society has attempted to find some easy "push-button" way to judge personality or character of people. Such "systems" sprang up long before the days of scientific psychology. Based on attempts to discover how men are alike, they were usually founded on just a few cases or observations. Certainly, these are not scientific methods. Since many of these gold-brick methods are still believed by many people, it is important to recognize them for what they are and to discard them from your thinking about human behavior.

Among such phony systems are the so-called "sciences" of astrology, phrenology, physiognomy, palmistry, graphology, and character analysis. All these false methods of judging people are

based on the physical appearance of an individual or on signs or omens outside him. The astrologer, for instance, holds that an individual's future is conditioned by the position of the planets at the moment of his birth. The phrenologist says that the shape of the skull and the bumps on the head are an indication of character traits.

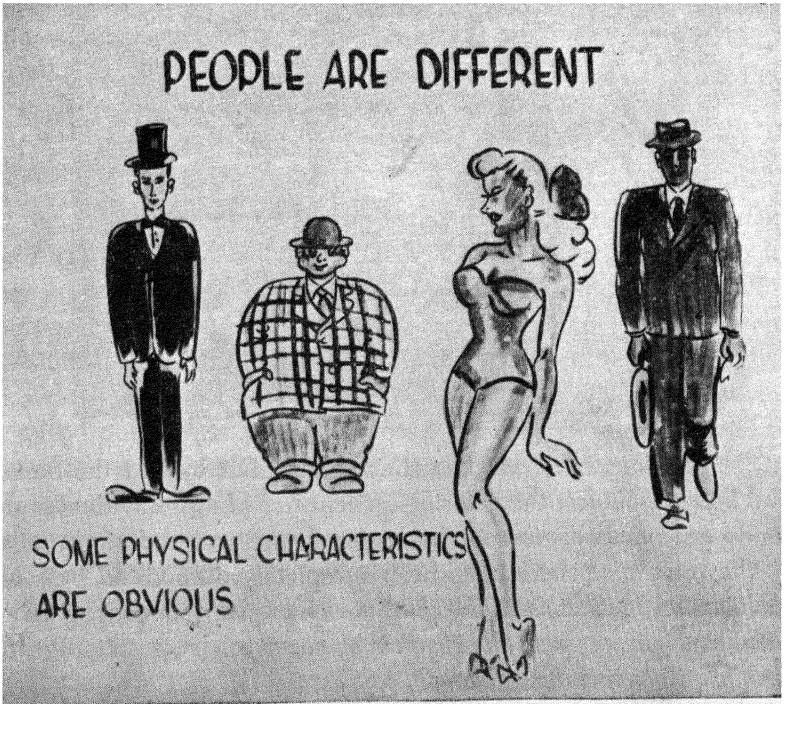
The physiognomist and the character analyst look at the bone and body structure, the coloring, or features of an individual and try to predict behavior on the basis of such external signs.

The pseudo sciences have been completely discredited by scientific investigation. Still, the public is swamped with propaganda for these systems, with the result that many otherwise intelligent people still believe in them.

Remember, personality and character cannot be judged by outside appearances. There is little relationship between a person's looks and his capacity, ability, and personality. You can't judge a person's ability or character by his appearance! His handshake, the size or shape of his head, the set of his jaw, his eyes, or any of his other features will not tell you anything whatever about his personality or character when you first meet him.

How Individuals Differ

Industrial psychology has made much of the fact that individuals differ from one another. You have noted the differences in ability and skill of your employees, even in those with nearly



the same training and experience. The most obvious differences are physical: height, weight, strength, hearing, vision, etc. That such differences are also present in all other traits of all people is not quite so well known. No two people in all the world's long history, even identical twins, ever have been exactly alike. Just as they differ in physical ways, they also are unlike mentally and emotionally in habits, interests, and attitudes—in fact, in all the traits which go to make up what we call personality.

Why Do People Differ?

People are different because of two causes, *heredity* and *environment*. Man inherits many of his traits from his ancestors, especially from his immediate parents. Among those traits most influenced by heredity are his physical traits, his aptitudes, his intelligence, and, to some extent, his temperamental characteristics. But he also develops and modifies many of his characteristics through experience. His surroundings influence him; the education and training he receives form him. Probably all his traits are changed to some extent by environment.

Training is a good example of the effect of environment. If men could not change, it would be useless to try to influence their behavior, skills, attitudes, and habits through training. It is important for supervisors to know the traits which are most influenced by environment, since they are easiest to change by training and sound supervision. Among these are a man's habits, his emotional patterns, mannerisms, speech, manual and mental skills, as well as his attitudes. On the other hand, the supervisor (as well as the employment manager) should recognize which traits are limited most by inheritance, so that he can recruit workers with the right potential of those traits needed for each job.

How Much Do Individuals Differ?

When we're asked to describe a person, to tell what he's like, most of us are inclined to talk in terms of extremes such as *good* or *no good, fast as lightning, slow as molasses, honest* or *dishonest.* This tendency to *type* or pigeonhole personality by static traits sheds little light on the dynamics of behavior. You have seen a midget and an occasional giant; you have seen a few idiots and perhaps a few geniuses. If we stop to think about it, we realize that only the extreme degree of any trait can properly be described as *very good* or *very bad,* etc. Actually, people differ vastly and express these qualities or traits in varying degrees, ranging from the very lowest to the very highest; but the vast majority of people rank as *average.* Now, apply this idea to a single characteristic, for example, the size of men's feet. Bingham tells of a shoe manufacturer who kept records on the number of men's shoes of each size he sold. Figure 1 shows the percentages of the sizes sold. Of a half million pairs sold, more than half (52 per cent) were sizes 8 and 9. Fourteen per cent bought sizes 9½ and 10; another 14 per cent bought sizes 7½ and 7. Fewer men (7 per cent) bought sizes 6½ and 6, while another 7 per cent bought sizes 10½ and 11. About 2 per cent of the sales were for 5½ and 5, and another 2 per cent for sizes 11½ and 12. The remaining 2 per cent of the shoes sold were about equally divided between very small sizes, ranging down to one tiny pair of child's shoes purchased by a carnival midget, and extremely large sizes, ranging up to one pair of size 17 sold to Primo Carnera.[1]

The Normal Curve of Distribution

When we chart these sales in terms of percentages of sizes sold, starting at the left with a column of the smallest sizes and

[1] After W. V. Bingham, "Aptitudes and Aptitude Testing," p. 26, Harper & Brothers, New York, 1937.

proceeding to the largest sizes on the right, we find that the tallest column would be for the average sizes 8 and 9. The other columns would taper off regularly, for both the small and large sizes, to the extremes, where only a very few midget or giant sizes were sold. By drawing a line through the tops of these columns, we could represent the same thing by a smooth curve.

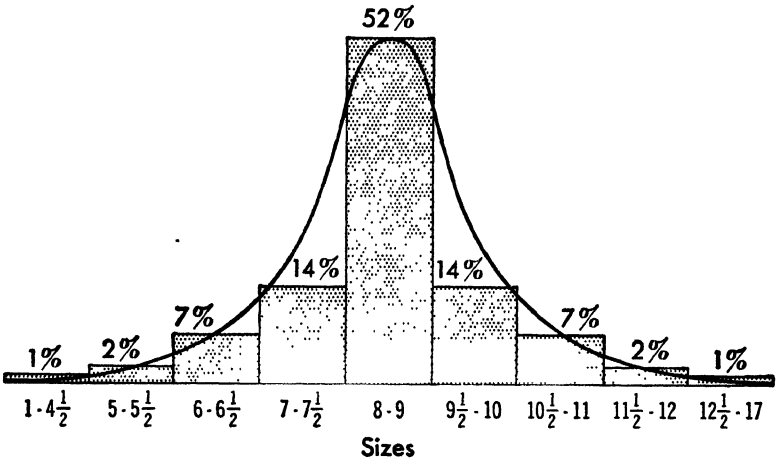


FIG. 1. The normal curve of distribution.

This bell-shaped curve is an important one; it is basically like all other curves which show the distribution, or the amount, of any human trait in the general population. It is called the *normal curve.* In any group, no matter what trait or skill you are considering (if you have enough cases and do not select them in some special manner), a chart showing the distribution of the posssesion of the trait by that group will be a curve shaped like this one.

Understanding that human traits vary greatly and are distributed in definite amounts throughout the population is important to you as a supervisor. If you know how your employees rank

with each other in their traits and skills, you know approximately what you can expect of each of them. The illustration we used of the sizes of men's feet is of a physical trait, but the same principle of distribution applies to all other human characteristics in large unselected groups.

For example, if you were to stop 5,000 men as they walk down a busy street and give them all an intelligence test, you would find that a few of them would be feeble-minded and a few very superior mentally. Most of them would rank about average. The proportions in each group would be about the same as those for shoe sizes. If we plotted a curve, it would be normal or bell-shaped. If you were to give the same 5,000 men a test for, say, emotional stability, you should find that they would range from a few very stolid, impassive individuals at one end of the scale to a few jittery, unstable, and excitable men at the other end. But most of them would rank between these extremes as average.

Although the same 5,000 men were used in measuring both intelligence and emotional stability, each individual would not be in the same rank or position in his group for these two traits. All 5,000 men would, as a group, produce the same sort of normal curve or distribution for these two traits, but the individuals within that group would not necessarily be in the same spot on the curves for both traits. For example, Joe Doakes, one of the members of the group, might be in a low position on the intelligence curve, yet high on the emotional stability curve.

WHAT INDIVIDUAL DIFFERENCES MEAN TO THE SUPERVISOR

Virtually every topic discussed in this book in one way or another deals with the effect of individual differences on supervision. In the chapters which follow, we shall consider how these differences affect behavior and what supervisors who are armed

with an understanding of them can do about them as they deal with their main problems. Right now we want to make a few general observations to show how very important it is that the individual characteristics of workers be considered before the supervisor attempts to control the actions of his subordinates.

Effect on Production

You will usually find, in a sizable group, that the best employee on a mechanical operation is about two to three times more productive than the poorest one. In clerical and sales work this ratio is often as high as 10 to 1. This ratio, of course, varies with the kind of operation, the size of the group, and how carefully the workers have been selected and trained. But even though all your men have had approximately the same amount of training and experience, you will probably find a wide difference in their capacities to produce. The amount of the difference becomes greater if the men have not been carefully selected and trained for their jobs or if the poor producers have not been weeded out. Production and efficiency differences are usually greater in the highly skilled or complex operations than in the simpler ones.

It isn't difficult to see what this means in company costs. Take the case reported by Tiffin. Among 36 assemblers on identical electrical assembly jobs, all being paid on a piecework basis, the poorest assembler turned out 60 units an hour, while the best turned out 145. The other 34 assemblers ranged between the lowest and highest producers in the number of units produced per hour. Compare the value to the company of the high producer with that of the low producer. In this case, the ratio is more than 2 to 1. Yet the better operators needed no more space, heat, light, or equipment, and undoubtedly less supervision. Overhead expenses for the company were the same for the worker who produced 60 units an hour as for the worker who produced 145. It would be greatly to the company's advantage to employ more

men who have the aptitude to turn out above average production and to transfer the poor producers to work for which they are better suited.[2]

Restricted Production

Scientific studies have shown that all aptitudes should be present in large groups of workers in certain proportions and amounts and that they tend to follow a normal curve. If conditions in a plant or department are normal and as they should be, that is, if all the employees are really working as efficiently as they know how, their production curve should look like the normal curve. Frequently, however, when the production of all workers is charted, the resulting graph is not a bell-shaped, normal curve that tapers off gradually at the low and high producing ends (as it should in every normal curve) but one that is sharply cut off near the middle of the curve.

[2] Joseph Tiffin, "Industrial Psychology," p. 4, Prentice-Hall, Inc., New York, 1946.

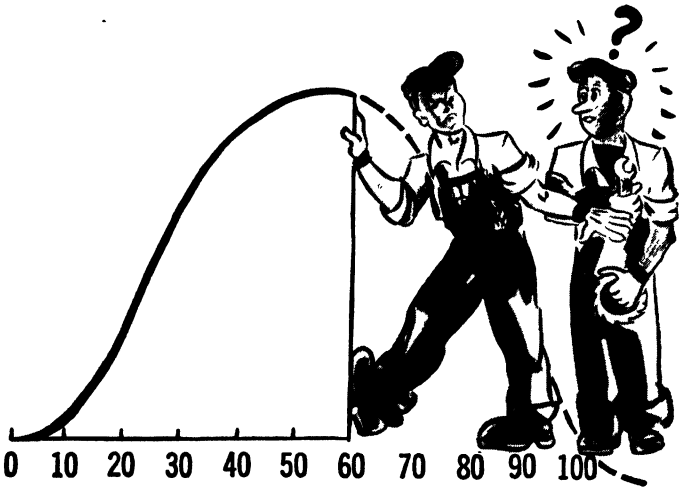


Fig. 2. Curtailed production curve.

Such a curtailed production curve indicates that the employees with the highest ability to produce are not working at their peak. Something is wrong! It usually means also that the most able workers have agreed to do no more than a certain amount of work or that the superior employees are working below their normal capacity. Such restricted production is often caused by a fear of rate cuts or other lack of confidence in management. Sometimes pressure from the other workers or the union forces the better producers to slow down. Even machines which are semi-automatic can be sabotaged, or overhead costs can be unnecessarily increased by days in getting materials, by machine stoppage, and in countless other ways known to the operators.

We hear most about restricted production in factories, but it isn't confined to them, as many good office managers can tell you. When employees aren't interested in their jobs, when they are not motivated to use their abilities, they are apt to cause slowdowns no matter where they work. Here is a typical incident.

The circulation department of a nationally known magazine had one clerical operation which was extremely complicated and detailed. The work required about one month of intensive training and practice for the clerks to remember and use correctly the thousands of subscriber code numbers to ensure that the changes in address, payments, subscription rates, etc., should be properly applied. Even then, long experience seemed necessary before the clerks could master the many necessary details.

College-trained women who successfully passed a barrage of intelligence and clerical aptitude tests were believed to be essential for mastery of the job. Many of them had had as much as fifteen or more years of experience, and the company was well content with them when they were able to process 95 cases a *day*. During the war, the supply of college applicants dwindled to the extent that the company was forced to employ girls with lesser education. That explained why Sophie, an eighteen-year-old high

school youngster, was hired for the work. Sophie had made unusually high scores on her tests, so the personnel director decided to take a chance on her. After the usual one-month training course, Sophie was assigned to the job on a trial basis. Three days later a tearful Sophie appeared in the personnel department for an exit interview. She was quitting. Between sniffles she told the personnel director that, try as hard as she could, the best she could turn out was 55 cases an *hour*. The astounded personnel director said, "You mean 55 a day, don't you, Sophie?" But Sophie insisted that her average was 55 an hour; a quick checkup in her department verified her statement. Poor Sophie had thought the daily production goal was an hourly one. The rest of her story came out in the interview. The older operators had made life miserable for her; threats in the washroom of dire things to come had brought about her attempted resignation. The stop watch later confirmed the restricted output. The older operators had agreed to produce no more than 12 cases an hour! This can happen, and is happening, in many a group. To an alert supervisor such a situation is a signal that something is wrong with group morale.

Effect on Training

"Practice makes perfect" is a common belief. So is the belief that long experience on a job tends to equalize skills. No one denies that proper training and experience ordinarily result in improved performance. However, training and experience nearly always widen the differences between individuals on complicated tasks. By complicated we mean such tasks on which a relatively long training period is needed before the average person reaches his maximum production. On such jobs the workers with the greater original aptitude usually far outdistance those less talented, even though they all have had the same training. But on

simple operations training sometimes brings workers closer together on production.

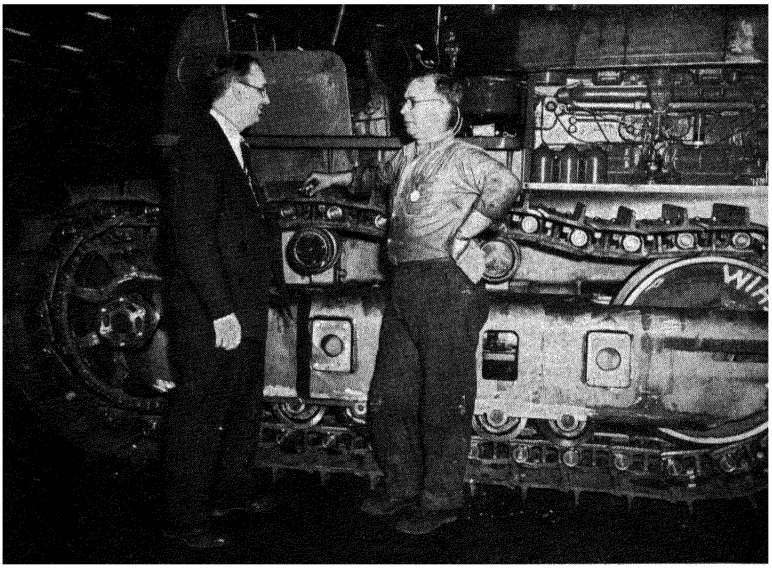
You cannot train a person beyond his limits; training can only improve him to the extent that he is capable of learning. Such ceilings for training are thought to be set by heredity. Suppose you put two men with no experience on a fairly skilled job. One of them has shown by test or trial that he has an average aptitude, and the other has shown a high aptitude for the work. Give them the same amount and kind of training, and you can expect that the difference in their production will usually be *greater after the training than it was before the training.* This also applies to our general experience, which is really just unorganized training. Training and experience do improve workers, but the ones with the higher aptitude usually improve more, especially on complex operations.

Other Effects

We can't attempt to catalogue the hundreds of other ways in which the differences in workers affect supervision. Certainly, the application blank record is not enough to place the employee on the job. More must be known of his personality, aptitudes, and interests if you are to match the employee properly with the right work. The employee who lacks the ability probably will never learn the job. He will feel blocked and frustrated at every turn; the errors he makes will reflect on the supervisor. On the other hand, the over-qualified employee soon becomes bored with his work, and you can expect horseplay, day dreaming, or resignation to result. When you are asked to make recommendations for supervisors or for promotions, you must know a great deal about your employees if you are to be fair both to the workers and to the company. How to issue orders, what manner of discipline to use, and what standards to set are but a few of the reasons for

the supervisor to cultivate an extensive knowledge of his subordinates.

The more you are able to recognize the differences among your men, the better you will be able to understand and help them. It's a good idea to have a friendly talk with each of your workers



Have a friendly talk with each of your employees every day. Nearly everyone will talk about himself if he feels he has an interested, sympathetic listener.

at least once a day. Make opportunities to discuss not only work problems but personal problems as well.

It's a sound practice for you to get acquainted with a new employee as soon as possible. The best time to start is the very first day he is on the job, when you're inducting the new man. (How to induct a new employee is discussed in detail in Chap. 7.) But it's never too late to learn more about your men; the job is never done. You can't know your men too well. In your daily

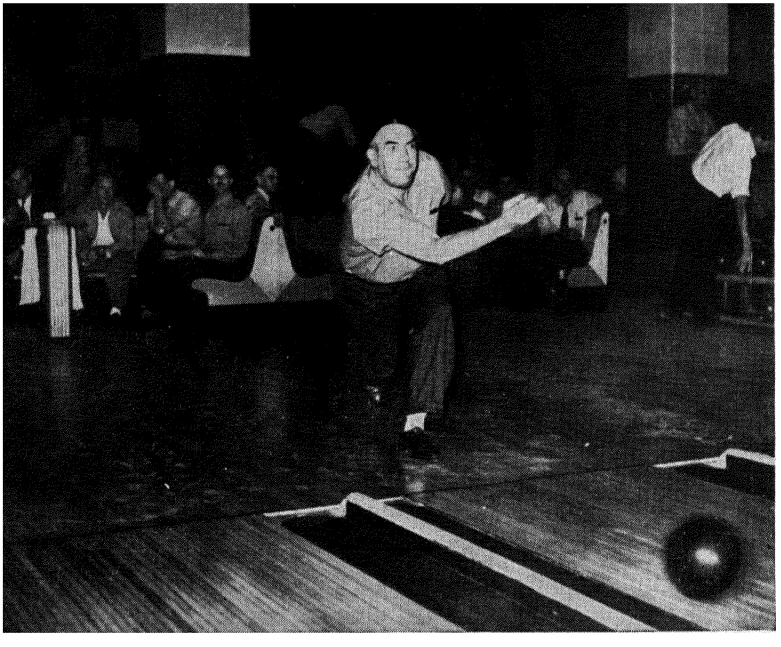
rounds, in every discussion with them, look for information that you can use later. You can get other helpful information from the records in the personnel files.

One foreman built good will and loyalty by a very simple device. For each of his men, he kept an index card on which he noted the birthday, education of the worker, names of the employee's wife and children, their ages, and the hobbies and interests of the man and his family. As he picked up additional information, he made more notes on each card. Simply by looking over the cards, this foreman could jog his memory on the individual characteristics of each of his men. Then he could talk easily to any one of them about personal subjects in which they were interested. This supervisor added another touch—he filed the cards in the order of his employees' birth dates. When a man's birth date rolled around, he congratulated the employee and extended good wishes. You know yourself how very flattering it is to have a friend remember your birthday or to have the boss remember the names of your children and ask about their progress in school. Remembering the intimate facts such as these is acknowledged to be one of the best ways to build friendly relations and gain cooperation.

Social Relationships

How intimate should a supervisor be with his men? Admittedly, it's desirable to be close to them, to know and understand them well. But should he mix with them socially? Should he pal around with them after hours? Here's a perplexing practical problem which must be faced and solved by every supervisor. You don't want to be a snob or an iceberg. "Familiarity breeds contempt," which, of course, means we can easily go too far in personal relationships and ruin our prestige and perhaps our authority. But, "friendship breeds confidence." Can we draw a hard and fast line between being aloof and being too intimate? No one can expect

a supervisor to drop his old friends after he has been promoted over them. However, certain situations are dangerous and must be avoided—carousing and gambling with the boys, for example. Usually we can understand people better after mixing socially with them than through office or shop contacts alone. When we visit a man in his home, we see and comprehend the forces of his environment. But some people try to take advantage of this situation. They may expect favors in the job. The answer to these problems depends entirely on the personality and ability of the supervisor. The seasoned supervisor who is secure in his position works out his own policy and practice in dealing with such problems. Some avoid personal outside contacts, but they don't



Company-sponsored activities, social affairs, clubs, and athletic events are excellent opportunities to get better acquainted with your men. Friendship and loyalties can grow in the bowling league.

humiliate the employees by acting in a superior manner. They compensate by friendliness on the job, at company affairs, and by being straightforward in expressing their regrets when they turn down personal invitations. Others accept them and thus build warm friendships with their men which establish mutual confidence on the job. If one has doubts about his ability to cope with personal relationships at work, he had best confine his social activities to group affairs, company-sponsored parties, and the like.

HOW TO KNOW YOUR MEN

There are two principal ways through which you can learn about your associates, by observing and by listening. You can watch what they do, study the way they do it, how they approach a problem or difficulty, and learn a lot about their habits and personalities. You can also listen carefully to what they say and can learn about their attitudes and feelings.

Observing

Being an accurate witness is not an easy accomplishment. We are always influenced by our own experiences, which to a large extent determine how we interpret what we see. Thus, two people observing the same incident often have very different ideas as to what happened. Their reports vary widely; yet both are entirely honest in reporting what they observed. The reasons for the differences of opinion, of course, lie in the fact that the two observers perceive or interpret what happened in the light of their own personal experiences. Surrounding all of their past experiences is a multitude of attitudes—the feelings which they have about things. Our attitudes indirectly control opinions and prejudices. They limit our interpretation of what we see or observe. To be an accurate witness or observer, one must try to eliminate personal bias as much as possible. The scientist calls

this "observing objectively." He means that, insofar as possible, one should not permit his own opinions and preconceived ideas to interfere with his interpretation of what he observes. Search for facts and weigh them! The supervisor can learn much about his men by accurate observation. His eyes are alert; he watches what occurs. But he must always weigh the evidence of his eyes against his own personal beliefs if he is to be impartial and objective and thus get accurate information.

Listening

Listening is often referred to as an art, because it is such a vital tool of supervision. It is so important a technique in the management of men that we shall have more to say about it in other chapters of this book. Simple though it seems, it is one of the most difficult practices to master. Probably this is due to the fact that most of us are a bit vain, especially when we become supervisors. We feel our own self-importance, and we like to give advice and to preach. That is really an expression of our own egos. Unconsciously we are trying to build up our own self-importance. Sometimes we talk to cover up our own insecurity. So it isn't easy to restrain this tendency to talk too much. But nearly all supervisors who really understand their men eventually learn to be good listeners.

Fortunately human nature comes to our assistance here. Everyone likes to talk about himself if he thinks he has an interested audience. It is usually easy to get almost anyone to discuss even personal affairs if you show him by your manner that you are interested and attentive. Let's analyze what happens in a situation where a man has a problem or a grievance. If you sit back and listen to him, you force him to do the talking. He must dip into his bag of ideas to sell you what he has in mind. Selling or persuading isn't easy. Futhermore, you, the listener, get a chance to study the attitudes of the man, to discover what he really is

thinking about; you also gain time to decide on your own course of action. All these advantages you have *if you listen.* But if, instead, you interrupt or contradict him after he has made a couple of statements, you probably lose these advantages, for you tip him off as to what you are thinking. The other fellow nearly always feels that you are being unfair because you won't let him state his case. This irritates him and often starts an argument. But do you convince him? No! Even though you refute every reason he gives, you haven't convinced him. The next time you see him he has a whole new set of reasons.

It may even be necessary for you to hold your hand over your own mouth to keep from interrupting. At least, that's what one master listener said he had to do. But he states that it has paid off many times. For when he feels he is losing his temper during a hot interview, the temptation is very great to tell the man off. His account of how he listens to a complaint or grievance is worth telling. Here is what he says.

"When a man has a grievance or thinks he has, he often lets it smolder inside himself for a long time before he actually says anything about it. He's often reluctant about coming to the boss with his gripes. He may beef to others, but he comes to the manager only when he reaches the boiling point. He is ready to quit or expects to be fired. But he wants the satisfaction of letting the boss have it first. I've known some of them actually to practice at home the speech they intend to make, and they don't spare the cuss words either. So he screws up his courage and barges into the boss's office. His eyes are blazing. He almost foams at the mouth. His blast releases his pent-up feelings, so I just sit back and listen to him. I hold my mouth shut if I have to, until he finally runs down. Then I look up and calmly say, 'Jake, I think I get what you mean, but *would you mind repeating that*?' You should see what happens to Jake. All the heat that was under his collar vanishes. He isn't even sure he's in the right office. His first

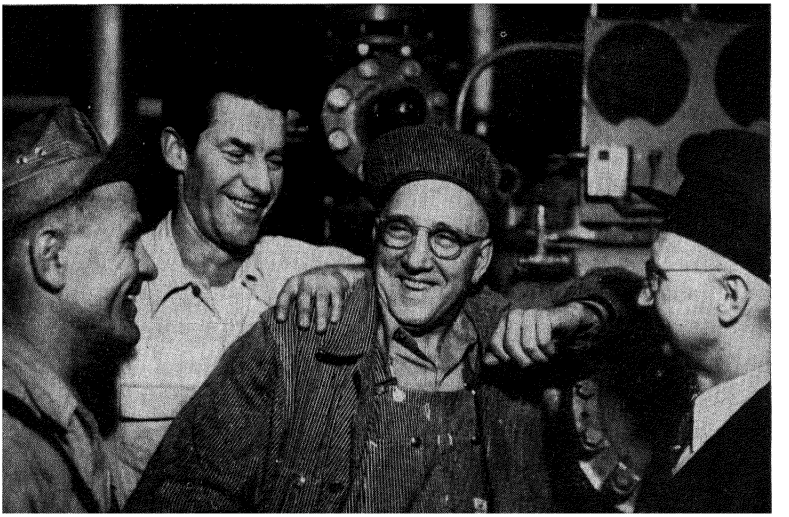
reaction is that the old man's trying to be fair. This cools him down. But his next reaction is something like this: 'This old guy's a bit of a dope; he doesn't catch on; I'll have to spell it out for him.' And what often happens when he repeats it is the pay-off. He starts telling his story again, this time more calmly. And often I have seen a man stop about half way through the second telling and look a bit startled. He stops and says, 'Say, I just got a new slant on this.' He has discovered the answer to his trouble himself; he has found the cause. You see, in trying to make it simpler for me he actually made it clearer to himself. All I have really done is listen, but he gives me credit for solving his problem."

GROUP BEHAVIOR

In business and industry, most people work as members of a group. The individual is the unit of the group. His behavior is largely determined by his personality traits, his attitudes, his needs, and incentives. At the same time, he is greatly influenced by the powerful forces of his group. His personality is never completely lost in group action. However, in many group situations, the individual's actions are different from his actions when alone. Supervisors should, therefore, understand the fundamentals of group attitudes and behavior.

Man's craving for respect and approval from his fellows is so strong in him that he will adapt or modify his behavior to be in harmony with his group. He'll do this sometimes even though the group's desires may be in conflict with his own. When the individual's desire or impulse is shared by his fellow employees, it becomes much stronger in him and in his group.

There are always a number of informal groups in any sizable department or company, groups, small and large, which defy all formal organization charts and which are bound together by



Employees usually form their own informal cliques and social units within the company. They choose their own leaders, who have powerful influence on morale.

psychological intangibles. Cliques composed of a few individuals who have some common interest, which is often remote from the actual work itself, overlap and combine with other small "social units" to form larger groups, again with some common cause or goal. These goal objectives of the group have powerful influences on the behavior and morale of the group and its individual members. Group goals frequently are not understood by management; indeed, they are not always clear to the group itself.

Groups seek their own leadership from within the group. In almost any situation, some member of the group assumes, or is appointed to, leadership. He retains his position as long as he is able to carry the group with him toward its objective. Different situations produce different leaders. This informally chosen leader serves as spokesman and, with group backing, often surprises

even himself with his boldness. His leadership is not necessarily based on his popularity; it depends on certain of his qualities which the group believes the occasion demands. Leadership will be discussed in detail in our last chapter.

The real leader of informal cliques or groups can be discovered by the techniques of a new science called "sociometry," which seeks to measure social forces and influences within the group. For example, the true leader of a group can be found by getting secret ballots or opinions from all members of the group. Each member votes for the members of his group he would prefer to have as bosses. No formal nominations are made before voting and no one campaigns. The votes usually show that a clique surrounds one certain individual and favors him as its leader. The votes indicate also that some members pair together, while a few individuals called "isolates" are not admitted to any clique or group. They are social outcasts for some reason. The methods of sociometry hold some promise as another means to discover the potential supervisors who have leadership status in their group.

Controls of Group Behavior

A group with strong desires is very suggestible and is open to emotional influences which may have no real relation to the facts of the situation. There are many situations in your organization that are shared by the individual and his group: working conditions, the boss, pay, methods, hours, etc. The interests of the group and the individual are so similar that when one member of the group is treated unfairly, all members of the group feel abused. This may lead to serious repercussions. On the other hand, when a member of the group receives satisfaction of his needs, the group as a whole gets a lift. The general attitude improves. Group spirit or attitudes can be either a destructive force or a power for good, depending on the reactions to the supervisor.

Within the group, individual members become more suggestible. During exciting circumstances, ideas are not critically examined with logic or reason. Instead, they are accepted as true and become more firmly believed as they are repeated by the group. Stock phrases and catch words or slogans are often adopted and used to express desires. What is desired by the group becomes what is *right*. This adds to the determination and excitement of the whole group. Individuals will endure hardships and compete with each other in serving the group. Sometimes this spirit mounts to frenzy and leads to mob violence. Individuals will do things they would never consider doing when alone—lynching, for example. Such extremes of group frustration happen occasionally in mobs or strikes, but the same influences are present in milder forms in all work groups. They must be understood and controlled if good morale is to be attained.

Since groups are highly suggestible, they are also capable of being swayed by leaders inside or outside the group. Consequently, an alert supervisor can channel the forces of group behavior to constructive ends. When you are certain that the ideas you want to put across to your employees will meet with ready acceptance from most of them, talk to them as a group. The majority who favor your ideas will help you influence the few who oppose you. But when you think your plan may not be very popular, that it will meet with stiff resistance, it is usually wiser to deal with your employees individually and try to convince them one at a time.

TOWARD BETTER UNDERSTANDING

The modern supervisor, whether he is in an office or mill, a bank or a government department, must know and understand his subordinates. He must be something more than a casual observer or a make-believe listener. He should also be something of a prac-

tical psychologist, since he must look and listen for the signs in behavior which tip him off about the individual differences of his workers and the motives and goals of groups. Such a challenging assignment would seem fantastic to yesterday's supervisor. Today it is the hard core of his job; he looks beneath and beyond the surface symptoms of behavior to determine the individual's and the group's basic attitudes and motives which control the things they do.

That's a pretty big order; but the better you know your workers, the better you will understand their behavior, and the better you will be able to supervise them. Modern leaders build sound human relations, and sound human relations begin by knowing your men.

QUESTIONS FOR DISCUSSION

1. How does the curve of restricted production differ from the normal distribution curve?
2. How well do you know the men in your department?
3. What specific steps can you take to get to know them better?
4. To what extent can training overcome lack of aptitude?
5. What are the reasons behind voluntary limitations imposed by the worker on his production?
6. Why is management often at fault in bringing about this condition?
7. Would you expect the marks made by winners in the Olympic games to be distributed normally?
8. How does a knowledge of the facts of individual differences help you to understand the men who work for you?

FOUR

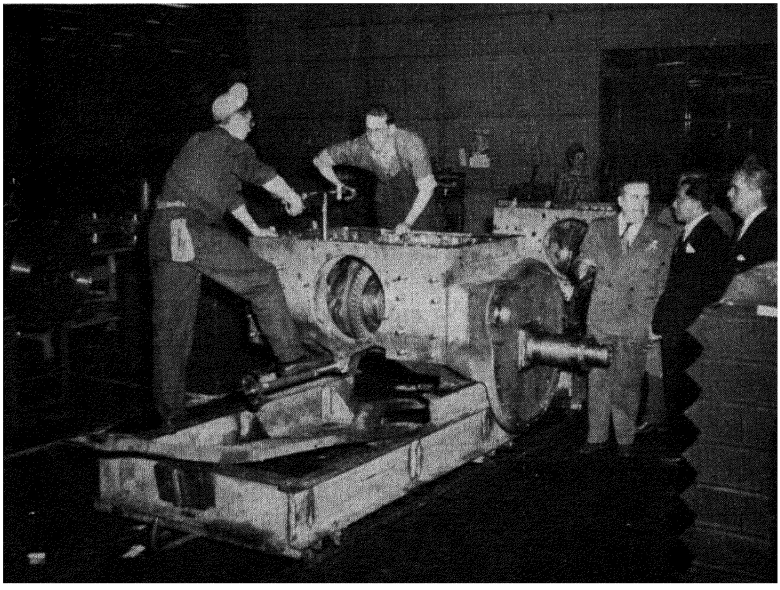
The Supervisor Looks Behind the Scenes—Attitudes

Don't treat your men like machines. You've heard people say that. William A. Patterson, president of United Air Lines, countered this overworked aphorism, in a talk to a group of university students, by suggesting that management should try giving the worker the same care and consideration that are given the machine. Here is a new twist. The students had heard, as doubtless you have, that the trouble with industry today is that men are treated like machines. Here, however, was Patterson saying that our trouble lay in the fact that we often do not treat them as well as we do our machines.

If you've ever seen a new and expensive machine pampered and nursed through the breaking-in period, you know what Patterson meant. Perhaps some company official comes down to show it off to a visitor. His pride shows in his every action and word. Does he say, "Here's Don Satler, the best darn operator in the business"? Or does he just talk about the machine as though Don weren't even there? Chances are nine in ten that the equipment gets all the attention. What happens when the machine begins to complain, when a little knock develops? Engineers and repairmen swarm over it like bees on a honeysuckle vine. But if Don's

back aches or his feet hurt or his head throbs, he has probably learned that he might as well keep quiet about it. Somebody might think he's getting too old for his job.

When a machine is set up in the shop, all spanking new, you find that the manufacturer has provided a well-worked-out set of operating and maintenance instructions to go with it. Sometimes they even send an instructor or an engineer along with it just to see that it gets the best possible treatment. But whoever heard of a set of instructions accompanying a new man on the job? A novel idea, and perhaps it has merit. Mr. Patterson was pointing up such discrepancies as these between the ways in which we handle men and machines. Most often it's the machine that gets the breaks.



Machines and equipment are often given more care and attention than the men who operate them. When you take visitors through the plant, do you ignore the workers as this executive seems to be doing?

Is top management responsible for this state of affairs? Maybe it is and maybe it isn't, but regardless of top management, the first-line supervisors and foremen are the ones who can do something about it. As far as the worker is concerned, the immediate supervisor *is* top management! But supervisors are interested in machines, things they can see and touch and operate. Often they got where they are because of their technical knowledge and skill, but it is a rare supervisor who doesn't soon learn that technical knowledge aids him in the solution of only a small percentage of his problems. He learns that most of his problems are those which in some way or another, involve human relations—85 per cent, some foremen say. Frank doesn't feel like working today. Paul says he needs more money. Gus is falling off in production. His complaint about the burrs on the parts coming through seems imaginary or just a coverup for his poor production. Technical knowledge doesn't help in the solution of these problems. Knowledge of people and how they behave is necessary, and most foremen and supervisors just do not have enough of that kind of know-how. This is the all-important human side of supervision. This is the foundation of good supervision.

Men and Machines

Press a control switch and a machine starts to work. Ever try to find that control switch on the operator or for that matter on yourself? Industry has been looking for that switch ever since the days of Frederick Taylor. Taylor figured that good work method was the switch that started efficient production. Management engineers have tried a lot of things on workers as they sought to find just the right button to push. They've used everything from cussing the worker out to vitamin tablets. Sometimes something is found that seems to work. All too often, however, it's just another patent medicine. In-plant music may increase production in Factory *A*; but in Factory *B*, making the same thing, it

doesn't affect production at all. Let's look for reasons behind difficulties such as these in dealing with human beings.

On the Importance of Attitudes

The Chicago Daily News, back in June, 1947, carried the following news release:

It's Mind Over Matter, Test Shows

The triumph of mind over matter was recorded in a year's study of the effect of a daily supplement of vitamin capsules on production and absenteeism.

Two hundred and forty-one steel workers were divided into three shifts.

One shift received a vitamin capsule every day.

A second shift unsuspectingly received placebo capsules which looked like vitamins but which were actually an inactive drug.

A third shift received nothing.

The treatment was rotated periodically among the three groups. A questionnaire was circulated every four months.

To the astonishment of the investigators, 35 per cent of those taking blank capsules said their appetite, sleep, and feeling of well-being were improved.

This equalled the number of vitamin consumers who gave similar answers. . . .

The rate of voluntary absenteeism was about the same for both the vitamin and placebo groups and lower than the nontreatment group.

Data on production yielded no significant differences.

A renewal of treatment during subsequent four-month periods showed no significant changes.

"Our data leaves no question regarding the improving effect of a placebo capsule," the investigators reported in the publication *Industrial Medicine.*

The study was begun by Dr. A. C. Ivy while at Northwestern and was participated in by Dr. F. T. Jung, F. E. Bing, and Lillian Cester.[1]

This was a well-controlled industrial experiment. If the experimenters had not given the blank capsules as a check, it is not

[1] Arthur J. Snider, *Chicago Daily News,* p. 14, June 25, 1947.

unlikely that steel workers would be gulping vitamin tablets by the dozen at company expense. Fortunately, the study showed that vitamins as such were not responsible for the observed changes.

But can we go along with the conclusion that the blank capsules in and of themselves had an improving effect on the workers? Do you think the workers would have answered the questionnaires in the same way if the experimenters said to them, "Here, take this blank capsule. It looks like a vitamin capsule, but really it isn't one. All it has in it is a little bit of sugar"?

Certainly under these conditions the placebos would have shown no effect. The results in this experiment were dependent upon two things: (1) the fact that the capsule was consumed, and (2) the attitude of the worker about the capsule.

If we call the capsule the "stimulus" [2] and the worker's writing on the questionnaire the "response," [3] we might diagram the situation like this:

$$S_{(\text{capsule})} \longrightarrow R_{(\text{expressed feelings})}$$

This diagram would imply, however, that the vitamin capsule works like a control switch on a machine. That is, give a person a vitamin and you will always get the same response. Since this is obviously not the case, a better diagram would be:

$$S_{(\text{capsule})} \rightleftarrows \boxed{\text{Person}} \rightarrow R_{(\text{expressed feelings})}$$

[2] Technically the word "stimulus" refers to anything that affects our sense organs. Thus light waves affect the sense organs in our eyes, pressure excites the skin sense organs, sound waves excite the hearing sense organs, muscle movements excite sense organs in our muscles, etc.

[3] By "response" we mean ordinarily any movement or activity produced in a muscle or gland, *e.g.*, finger movement, from muscular activity, or flow of saliva, from the salivary glands of the mouth. Talking is considered a response in that movement is produced in the vocal chords, tongue, lips, diaphragm, etc. Thinking, even when not accompanied by speech, is also often considered a response.

The diagram shows that the stimulus acts upon the person and that the response comes from the person. Therefore, the kind of response you get from any given stimulus is very definitely dependent upon the person who receives the stimulus. One stimulus, thus, could produce as many different responses as there are people to whom it is applied. Note that in the diagram there is an arrow pointing from the person to the stimulus. This indicates that the person may affect the stimulus, just as the stimulus affects the person. Thus, if the person were told that the capsule was not a vitamin at all but merely contained sugar, the sugar capsule would in effect become a very different stimulus than the vitamin capsule, *even though the person could not tell which was which by taste, touch, or sight.*

Attitudes

Thus, factors within the person affect both his interpretation of the stimuli which surround him and the responses he makes to these stimuli. Of paramount importance among these factors is *attitude.* Attitude refers to an individual's predisposition to act in a certain way. A worker doesn't like his company—his attitude toward it is unfavorable. With this in mind we can make some predictions about how he will act in certain situations. Thus, with knowledge of his attitudes, we might expect him to complain, to show less cooperation, etc. It would be foolish, however, to expect to make accurate predictions about his behavior, knowing only one of his attitudes.

"If you don't like the company, why don't you quit?" the boss might ask. The answer, of course, lies in the fact that the worker has other attitudes which must be considered. He has a favorable attitude toward his family, the material comforts of life, and toward his job, if not the company. These attitudes keep him on the job. In predicting behavior, the effects of many attitudes

must be considered. In controlling behavior, many attitudes must be molded and formed.

A Classic Example

Back in 1927, engineers of the Hawthorne plant of the Western Electric Company wanted to see if improvements in lighting would bring about an increase in production. Simple though it may seem, the answer was never really found. Years later they were still working on some of the problems that came up as a result of that study. Its full implications are not thoroughly understood even today.

Here is what happened. After a preliminary study, two groups of workers were selected. One group worked under the same illumination all the time, while the other worked under different experimental lighting conditions. Incidentally, these two groups worked in different buildings so that they could not influence each other's production. As brightness of illumination was increased for the experimental group, its production increased. But so did the production of the control group, which experienced no comparable changes in illumination.

Other experiments showed equally curious results. In one experiment in which the amount of light was decreased from 10 to 3 foot-candles in successive changes, production did not fall off. At 3 foot-candles the workers complained about the lighting, so the experiment was discontinued. Two volunteers, however, were set up in a special shop and continued working until the brightness of the light in the working space was that of the ordinary moonlight night (0.06 foot-candle). They still maintained efficiency, and in fact reported that they felt less tired and experienced no eyestrain.

As experiments on the effects of illumination on production, these studies were failures. However, they raised questions about

the human side of production that management wanted answered. A new experiment was set up. Five workers, all experienced relay assemblers, and one layout operator volunteered. They were set up in an experimental shop and were told that this was to be a study of the effect of rest periods and shorter working weeks on production. Table 1 shows the different experimental conditions that were tried. Figure 1 shows the over-all results in terms of the number of relays produced.

TABLE 1. DESIGN OF THE HAWTHORNE INVESTIGATION: RELAY ASSEMBLY TEST PERIODS.

Period	*Special feature*	*No. of weeks duration*	*% decrease in work week* *	*Program*
1	In regular department	2	0	Introductory plan
2	Introduction to test room	5	0	
3	Special group rate	8	0	
4	Two 5-min. rest periods	5	1.9	Rest pauses
5	Two 10-min. rest periods	4	3.8	
6	Six 5-min. rest periods	4	5.7	
7	15-min. A.M. rest (lunch) 10-min. P.M. rest	11	4.8	
8	Same as 7—4:30 stop	7	10.0	Shorter work week and check on previous conditions
9	Same as 7—4:00 stop	4	15.3	
10	Same as 7	12	4.8	
11	Same as 7—Sat. A.M. off	9	13.2	
12	Same as 3	12	0	
13	Same as 7—operator furnishes A.M. lunch and company furnishes beverage	31	4.8	

* Based on standard work week of 48 hours. (After F. J. ROETHLISBERGER and WILLIAM J. DICKSON, "Management and the Worker," pp. 30–89, Harvard University Press, Cambridge, Mass., 1946.)

During periods 1, 2, and 3, the only changes made were the change to the experimental shop, a slight change in method of work, and a change in the method of pay. In periods 4 to 7, different methods of giving rest periods were tried. During the remaining periods, shorter working days and weeks were tried, and check runs were made on some of the earlier experimental conditions.

Figure 1 shows how production was influenced during the various experimental periods. In general, production went up. But here again it appears that production increases were not related in any logical way to the experimental conditions. Period 7 and period 10 were identical; yet production was far superior during the latter period. To all intents and purposes, period 13

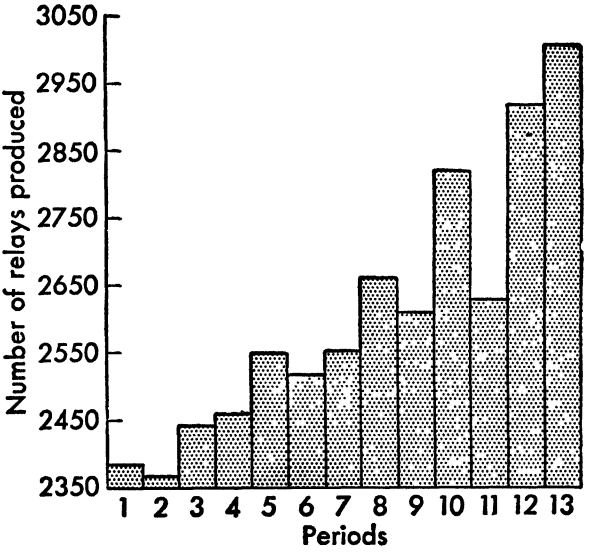


FIG. 1. Average weekly output of relays. (After ELTON MAYO, Supervision and Morale, *Human Factor*, Vol. 5, pp. 248–260, 1931. Also in S. L. PRESSEY, J. E. JANNEY, and R. G. KUHLEN, "Life: A Psychological Survey," p. 542, Harper & Brothers, New York, 1939.)

was also the same as these two; yet production during this period, which lasted for a total of 31 weeks, greatly exceeded production of the earlier periods. In periods 3 and 12, no rest periods were introduced; yet production almost reached maximum during the latter period and showed only a slight increase over production in the regular shop during the former.

How can these results be accounted for? The experimenters quickly reject the possibility that rest pauses in and of themselves account for the changes. Subsequent experiments indicated that some of the increase could be attributed to the change in pay and some to the changed working conditions, *i.e.*, the small and congenial test room, but neither of these factors is sufficient to account for the major changes in production that occurred. The idea that relief from monotony and fatigue was important to the results is also rejected.

Apparently the most important thing that happened during the course of the experiment was that the workers began to develop a new *attitude* toward their supervisors and toward the company. Simply in conducting an experiment with these workers as subjects, the company showed just how important it thought each person was. The workers had been asked questions about how they felt; they had been given physical examinations; their suggestions had been solicited. In short, their supervisors for once showed them that they were something more than unimportant nonentities. They responded with a full day's work that exceeded anything the company had even hoped for.

Not only did their attitude toward supervision change; their attitude toward each other changed. In the big shop, working with a hundred other people, their fellow workers were mere acquaintances. In the experimental room they became friends. They developed interests in common both inside and outside the shop. The Western Electric Company has not forgotten the lessons of these experiments. Today one of the company's major aims in the de-

velopment of its supervisors is to teach them the importance of the human side of supervision.

Job Satisfaction

"I'd rather do this job than anything else on earth." Foreman Don Jancy thought he was dreaming when he chanced to overhear Phil Downs make this remark to Herb.

"Wouldn't my job be sweet if everybody in my shop felt that way about his job," he thought. He felt a little guilty, but he kept right on listening.

Phil continued, "For one thing I like the work itself. I can do it. It took a lot of effort and training, but I can do anything with this machine but make it talk. And I'm working on that now. For another thing the pay is good and steady. I'm not worried about a layoff. Then, too, I like the guys I work with. Even you, Herb! That's important, too. I've worked in shops where the fellows were always at each other's throats. I quit as soon as I could.

"I think the company here is okay. They may not be perfect, but I think they're trying to give us all a break.

"I don't know why I'm telling you this, Herb. Maybe just because I feel good and things seem to be going well for me. Both my youngsters got on the honor roll at school, and I feel pretty good about you fellows electing me departmental representative. . . . Be seeing you, Herb."

Phil's remarks made Don feel pretty good. He wished that all his men were like Phil, but he knew that would be expecting too much. He wished he could find out sometime just what they were thinking. Possibly there were things he could do that might make the dissatisfied workers a little happier.

Find Out What the Worker Thinks

Don is right when he says that he must know what the worker is thinking in order to do the right things to bring about better

job satisfaction. Without that knowledge he must rely strictly on his own judgment. Sometimes this is good, but often it is insufficient. We all possess blind spots in our thinking—supervisors are no exception. The supervisor's judgment about what is good for the worker, if he has no way of determining accurately what his people are thinking, is dependent upon his own personal experience. While this experience may be broad, it is also likely to be biased.

"I don't know what these guys are grumbling about; they've got it a hundred times better than when I was in the shop. We worked longer hours for less pay. We didn't have cafeterias and rest periods and medical services. I just can't understand the kind of worker we get today. They want everything for nothing."

The supervisor who said this is thinking solely in terms of his own experience. In a sense he has given up trying to find the answer. He feels that the trouble lies in the fact that somehow, between his day and the present, the quality of the working man has deteriorated. If he could just find some of those old-time workers, his troubles would be over. Perhaps, for a short time at least, they would be. But his approach is unrealistic. *Fundamentally, the worker of today is the same as the worker of previous generations.* True, his attitudes may be somewhat different, but the need to be treated as an individual was as strong then as it is now. There is the same desire for security, and the same desire to become a part of an organization that commands respect and deserves loyalty. A friendly and cooperative spirit in the working force is today no less important than it ever was, nor has the desire for honest and fair pay for craftsmanlike work diminished.

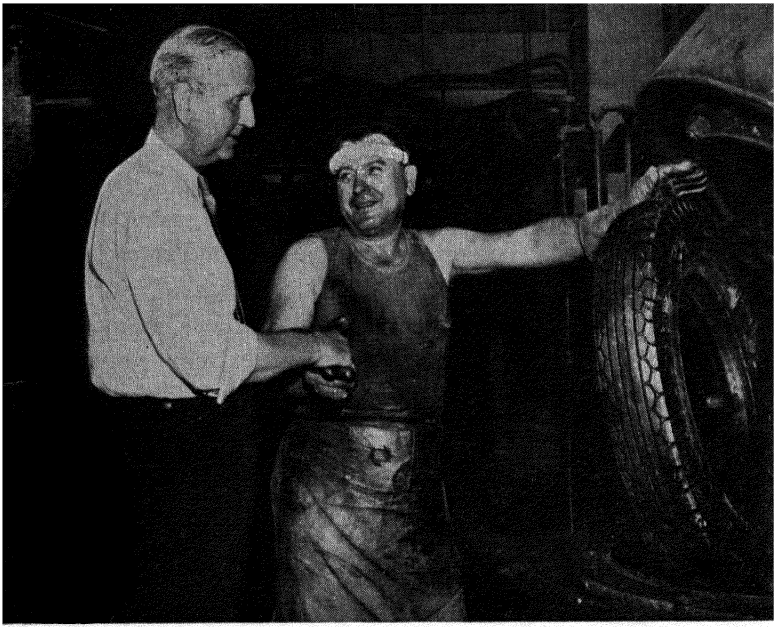
In the galleys of ancient Rome, the men who pulled the oars till they died or were beaten to death in their chains had the same desires and feelings. But mark this—their galley masters, were they alive today working with modern men, would probably long for the old days. The whip was their solution to personnel

problems. The slave markets were their hiring halls, and Caesar's legions were the recruiters of their working force. Their workers may have been docile under the shadow of the whip, but they were not living the lives that we believe to be the right of a worker in a free democracy. Nor was that unrecognized even in those ancient days.

Do unto others as you would have them do unto you; so the Good Book tells us. Too often this is interpreted to mean, "Why should you have it any better than I did when I was in your shoes?" Nor does the Golden Rule mean that just because I think that I like working ten hours a day under extreme pressure, you should be treated that way. Rather, in modern terms, it could be restated (certainly in a far less beautiful way) in this fashion: "I have certain needs that I should like to have fulfilled. In my dealings with others I should recognize that they too have similar, if not identical, needs. Therefore, I should act in a way that will allow them to realize, insofar as possible, their need fulfillment."

To follow this principle most effectively, of course, the supervisor must understand something of the individual's needs. This will be discussed more extensively in the next chapter; but, for the present, let's concentrate on ways of finding out what the worker is thinking. Remember that the worker's thoughts and opinions are expressions of his attitudes and that these, in turn, are dependent upon his needs.

There are many ways of finding out what the worker thinks. The first and most obvious is simply to ask him. However, this is not the only solution to the problem, nor is it a completely satisfactory one. Probably if Don Jancy had asked Phil Downs how he felt about his job, Phil would have told him the same thing he told Herb. Don would have wondered, though, whether Phil was telling the truth or whether he was simply polishing the old apple. Having chanced to overhear the remark, Don felt that it was probably an honest expression of attitude.



John L. Collyer, president of B. F. Goodrich Company, knows many of his men personally and is never too busy to listen to their ideas and problems. He understands the vital importance of employee attitudes.
(*Courtesy International Correspondence Schools.*)

Many methods have been used to study attitudes, but not all are equally useful to the foreman. Some companies have hired experienced interviewers to make surveys. These interviewers give complete assurance to the employee that his statements will be kept entirely confidential. Some have conducted surveys by means of unsigned questionnaires. Others have used attitude scales designed and administered by the staffs of local universities. Gripe boxes have been set up for both signed and unsigned complaints. Sometimes suggestion boxes have been used for this purpose, even though such usage detracts from the original purpose of the suggestion system.

Although not sanctioned by forward-looking management, and in some instances actually illegal, labor spies and private detectives have been used. Counseling programs have also furnished information about trends in employee thinking. However, if this is generally known to the employees, the usefulness of the counseling may be greatly reduced.

In most of the methods mentioned, management has attempted to find out what the employee doesn't like or what is troubling him. The approach is essentially negative, even though the information is most important. Consequently, foremen and higher levels of management must be prepared for the tone and content of the replies they receive. If you ask what is wrong with your shop, with proper safeguards for the secrecy of the replies, be assured that you will find out that some conditions are not liked. In other words, you might as well be prepared to have your feelings hurt if you are at all sensitive.

More important, be prepared to act upon the complaints you receive. This doesn't necessarily mean that every condition can, or even must, be corrected. It does mean, however, that you show fair-mindedness in recognizing the feelings of the individual that prompted the expression of dissatisfaction. If something can be done, it should be done. In any event, if an open survey such as a questionnaire has been used, the results of the survey and the actions taken should be revealed to the group.

Two Examples of Employee-opinion Surveys

Several years ago, Thompson Products, Inc., of Cleveland, conducted a survey and as soon as possible made the results available to the employees in booklet form.[4] Where replies to the 53-item confidential questionnaire indicated action was necessary,

[4] See Stopping Grievances before They Grow, *Modern Industry*, Vol. 13, No. 2, pp. 49-64, 1947.

corrective steps were immediately taken. Here are some of the items used in that questionnaire:

1. This questionnaire is completed by a ___Man ___Woman
2. How long have you worked for the company? ___Years ___Months
3. How do you feel about your present job? ___Fine ___Don't like it ___Okay ___Okay for the present. Remarks.
4. As compared with what you might earn elsewhere at the same type of work, do you think your earnings are ___About average ___Low
5. Do you understand how the bonus system works? ___Completely ___General idea ___No
6. Do you think the principle of our bonus system is fair? ___Yes ___No: If your answer is "No," will you please give us your reasons _____

   _____
7. Check all the descriptions that best fit your

	FOREMAN	SUPERVISOR
Fair all the time	_____	_____
Fair most of the time	_____	_____
Seldom fair	_____	_____
Never fair	_____	_____
Knows his stuff	_____	_____
Gets by	_____	_____
Workers know more than he does	_____	_____
Sets a good example	_____	_____
Does not set a good example	_____	_____

8. Do you think the company selects the best qualified people for promotion? ___Most of the time ___Part of the time ___Almost never
9. If you had your choice of the following working hours, which would you choose? ___The present 7½-hour day ___A 10-hour day ___A 12-hour day

Of course, this is just a sample of the 53 items in the original questionnaire, but these are typical of the remaining items. No

signatures were required, and the worker sent the answers directly to a local university in a previously addressed and stamped envelope. The answers reveal how the worker feels about many aspects of his work, from supervision to pay. Where necessary, space is provided for comment. Often the remarks written in these spaces are the most important and revealing things on the questionnaire.

Questionnaires as good as this one are difficult to construct. Usually a trial and error process is used. Trial forms are made up and tried out on a few workers, or foremen and shop stewards are asked for their comments. Objectionable items are dropped out or are reworded. Poorly worded questionnaires can stir up more trouble than they can ever hope to cure. Even some of the above items could be improved. Take the last one, for example. It is loaded heavily in favor of the present working day. In analyzing the answers to it, why should anyone prefer a 10-hour or 12-hour day? Perhaps because of overtime pay, but nothing is mentioned about overtime. Also it is quite possible that some would prefer a shorter working day, but they have no opportunity to express their opinions.

The Thompson survey, however, is infinitely better than the questionnaire dashed off by the president of a small musical-instrument manufacturing company. His company was faced with a union organizing campaign. To forestall it, he hit upon the idea of an attitude survey. Here are some of the questions he asked. Workers were to answer "yes" or "no." No opportunity was given for remarks.

1. Do you like your job?
2. Do you like your superintendent?
3. Do you like your foreman?
4. Do you have any grievances?
5. Do you realize the consequences of a strike?
6. Do you realize that a loss by this company will affect everyone?

These and five more similar questions were asked. Nothing of importance could be revealed by such a questionnaire as this one. In the first place, by forcing the workers to answer "yes" or "no," no opportunity was given them to express degrees of feeling. Consequently 42 of the 46 workers polled answered "yes" to the first question. One can only guess to what extent they liked their jobs. Compare this with item 3 on the Thompson questionnaire to see how this question could be improved to yield more useful information.

Again, compare item 7 on the Thompson survey with items 2 and 3 above. The Thompson survey would give you a much clearer picture of attitudes toward supervision.

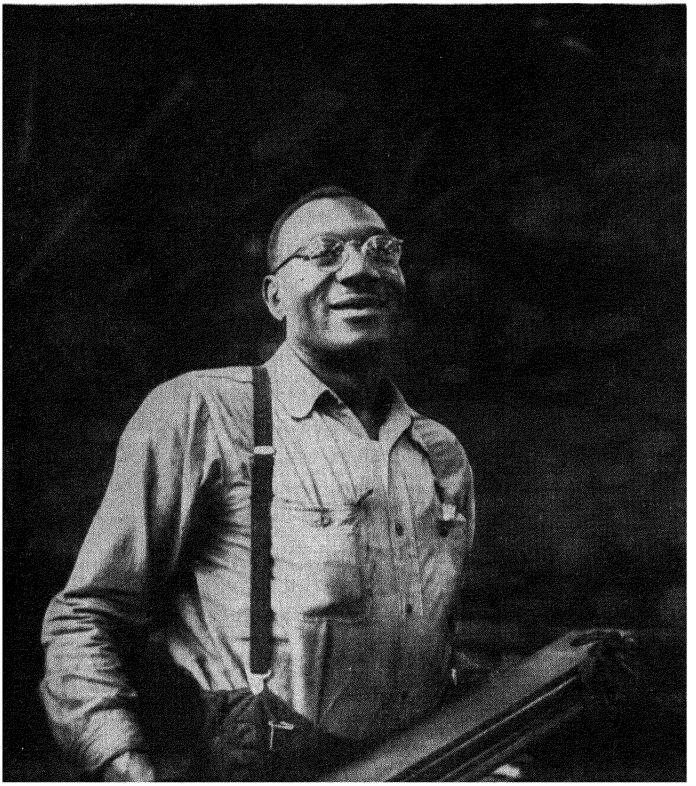
"Do you have any grievances?" Answer "yes" or "no." What kind of information can you get from this question? Exactly one-half of the 46 workers answered this question "yes," and eight left it blank. Does it help to know that half your employees have grievances, when you have no idea what they are or how seriously they may be regarded?

Questions 5 and 6 are clearly propaganda items designed to make the employees think twice about the consequences of unionization and strikes. Such items have no place in a questionnaire given with sincere and fair motives. The great majority of the group answered both questions "yes." What would you interpret their responses to mean? Obviously no interpretation of any consequence can be made with certainty from these data.

In summary, then, we might say that the supervisor can get information about what his workers think in two different ways:

1. He might talk to them face to face.
2. He might construct some sort of questionnaire.

In talking to them he might use a formal interview method in which he asks a set of specific questions. On the other hand, he may use his casual contacts with his men to glean this infor-



Happy and contented workers are made—not born!

mation. Regardless of his approach, he must follow the principles of good interviewing and good listening discussed in Chaps. 3, 6, and 12. He must also learn to interpret what he hears in the light of possible hidden meanings. In addition, since this method makes it impossible for the worker to conceal his identity, the supervisor must recognize that the remarks made are quite likely to be only those which the worker feels safe in making.

The questionnaire method, since it is anonymous, eliminates the difficulties associated with the worker's identity. New diffi-

culties, however, are introduced. These must be considered carefully *before* the questionnaire is constructed.

Rules for Constructing the Employee-opinion Survey Form

Briefly here are the steps in preparing an employee-opinion survey form:

1. Decide in advance why you want to conduct the survey. What is its objective?
2. Determine what information you need in order to reach the objective you have set up.
3. Figure out just what you will do with the information when you get it. (Unless these three steps are carefully carried out, the survey is likely to be a waste of time. Even professionals slip up by failing to follow these steps.)
4. Construct each item carefully and measure its value in terms of the decisions reached in the previous steps.
5. Make sure you obtain sufficient identifying information so that useful analyses can be made. (Remember that you are not trying to find who filled out the blank.) Usually this refers only to such information as age, years of experience, sex, department, etc.
6. Examine items to see that they are simply and clearly written. Avoid negative statements. Eliminate all double-barreled questions, such as this one:

   How would you rate your foreman both as a person and as a supervisor?

   a. Excellent
   b. Better than most
   c. About average
   d. Could be better
   e. Rather poor

   Answers on this item are impossible to evaluate, because you cannot tell whether the worker is referring to his foreman as a *person* or as a *supervisor.* If you are interested in both interpretations, ask two questions.

7. Have other supervisors criticize the questionnaire. Revise where necessary.
8. Try out on a small group of workers and get their comments and reactions.
9. Prepare final form of questionnaire.

Conducting the Survey

The next problem is the actual administration of the survey. The workers may fill it out either in the shop or at home. If the information is obtained in the shop, the percentage of forms returned will be considerably higher than if the questionnaire is taken home. On the other hand, it means time out from work. This may be a minor consideration if the questionnaire is short.

If the worker takes the form home, he may feel that his identity is better protected; consequently his answers may be more frank. But percentage returns tend to be low when the questionnaire is taken home. Furthermore, since returns tend to be incomplete, there may be a tendency for those with definite axes to grind to return their forms with greater frequency than the average worker, who may be less interested in the outcome of the survey. By and large, best practice seems to be to have the workers fill out their questionnaires in the shop on company time.

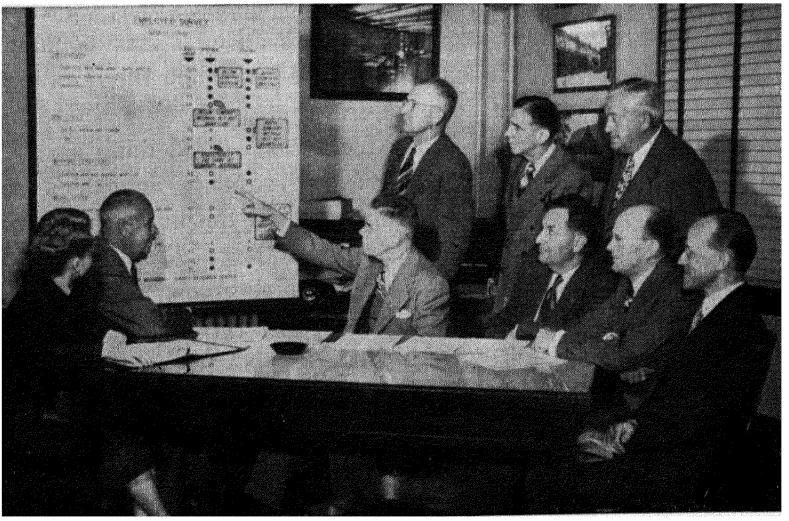
Interpretation of Results

The next major problem is the interpretation of results. The greatest error likely to be committed here is that of overgeneralization on the basis of insufficient evidence. Results from local surveys apply only to the local situation. It is wrong to generalize from one such survey. If the workers in one plant think that security is the most important factor in their jobs, it is not permissible to assume that all workers tend to rate this factor high. If workers in one department seem dissatisfied with working conditions, it does not mean that workers in all depart-

ments are equally dissatisfied. There are frequently greater differences between departments in the same company than there are between different companies. In general, be cautious and conservative in your interpretations.

Action

Finally, after the results have been tabulated, action must be taken and the workers informed of the results. This is the most important step in the whole procedure, and it is the only one which contributes directly to the improvement of morale. The workers will naturally be quite curious about the results of the survey. Quick results will give them a sense of participation in



At Detroit Edison, department head explains attitude survey findings as they apply in his department. Pertinent findings are quickly disseminated to all employees through supervisors. Experts from Survey Research Center, Ann Arbor, Mich., play quiet advisory role. Job of putting survey into action is done by line supervisors whose word carries real weight with employees. (How Democratic Can Industry Be? *Modern Industry*, Vol. 20, No. 3, p. 64, September, 1950.)

a company or department project. This feeling of participation is one cornerstone upon which good morale rests. Survey results can also give the employee an opportunity to see just how his own opinions and attitudes measure up against those of the group. In some instances, just this process of comparison can bring about improvement of the individual employee's attitude.

At this point we should introduce a note of caution. Surveys have been discussed above on a "how-to-do-it" basis. Of necessity, the presentation of the procedures used in conducting such a survey has been greatly simplified. Only the rash supervisor would plunge headlong into a survey program, armed solely with the information contained in the last few pages. The best practice would be to call in expert professional help for advice early in the program.

What Do Workers Want from Their Jobs?

The obvious answer to this question is "money." But in and of itself it is a very incomplete answer. Men cannot be bought and sold like cattle. Good and efficient workers cannot be developed simply by manipulating the contents of the pay envelope. Yet, to be realistic, we must recognize that without pay there would be no great industries of the sort we know today. Certainly men work to obtain money to buy the necessities and the comforts of life, but to think that money and what it buys are the only considerations of importance to the worker is an extremely short-sighted point of view.

On the other hand, attempts to build good employer-employee relations that ignore pay or attempt to substitute something else for pay are equally poor. A good human-relations program must rest upon a fair and equitable pay scale. This is so in spite of the fact that many of the most quoted attitude surveys customarily point out that things other than "high pay" are ranked at the top of the list. In Table 2 Maier summarizes a number of these studies

and gives us the average rank assigned to ten job factors by various groups of workers.[5] You will note that *high pay* is ranked third in this list and that *steady work* and *opportunity for advancement* are both ranked higher. Don't be misled into thinking that this is the way all workers would rank these factors. In three of the groups whose records are summarized in this table, *high pay* was given the sixth place; in one it tied for fourth place, and in another it was in second place.

TABLE 2. THE AVERAGE RANK ASSIGNED TO CERTAIN JOB FACTORS BY FIVE DIFFERENT GROUPS OF WORKERS

	Average rank
Steady work	1.4
Opportunity for advancement	3.4
High pay	4.9
Opportunity to learn a job	5.2
Comfortable working conditions	5.3
Good boss	5.4
Good working companions	5.7
Opportunity to use your ideas	6.7
Good hours	8.6
Easy work	10.0

Many things influence the way people will respond to such surveys. It is quite likely that the surveys reflect, for one thing, existing conditions. Suppose that the group being surveyed was engaged in very hard physical labor but was receiving adequate pay. Possibly such a group would rank *easy work* high on the list. *Steady work* was ranked first or second by all five groups. Suppose, however, that business conditions were good and that plenty of jobs were available. Quite possibly, then, *steady work* would drop lower in the list, because the workers would have had steady work and would not be afraid of losing their jobs.

[5] N. R. F. MAIER, "Psychology in Industry," p. 268, Houghton Mifflin Company, Boston, 1946.

We must remember, therefore, that surveys do not reveal unchanging attitudes of workers, but rather reflect the feelings of workers on particular jobs at particular times. It would be wrong, therefore, to conclude on the basis of certain published surveys that workers do not consider pay as important as many other factors. In fact, some surveys have pointed out that workers in the automotive industries consider pay most important. Similar results have been obtained on surveys of city employees.

Consequently, when you read survey results, do not jump to the conclusion that the final answer has been given to the problems of what the employee wants. You cannot take such results and immediately apply them to your own workers. First, check the group on whom the survey was made. Ask yourself if they are doing work that is similar to the work your people are doing? Are their conditions of work similar? Do they come from a similar part of the country? If you can answer "yes" to these questions, then you can consider the results as *suggestive*, and only *suggestive*, of what you might find among your own workers. To *know*, you must actually conduct the survey in your own shop.

An Unusual Survey

In September, 1947, General Motors plants throughout the country broke out in a rash of mysterious publicity. The initials "MJC" appeared everywhere. For two weeks, workers speculated on their meaning; then they learned that "MJC" meant "My Job Contest." This was how the most extensive and expensive attitude survey in the history of American industry was launched.[6]

Between September 15 and midnight, October 31, a total of 174,854 entries were received. Over 58 per cent of the hourly rate employees and certain eligible salaried employees submitted letters on why they liked their jobs. Letters of all lengths and of

[6] See "The Worker Speaks: My Job and Why I Like It," p. 176, Department of Public Relations, General Motors, Detroit 2, Mich., 1948.

all types were received. Several dozen were written in foreign languages, including Arabic and Latin. "More than 5,000 prizes, all General Motors products, were offered, the 40 top prizes being automobiles." [7]

This was indeed a unique attitude survey, but it was still more. It was a morale builder with a positive emphasis. It was an opportunity for employees to participate in a company-wide endeavor. Most attitude surveys, as we stated earlier in this chapter, take a negative approach in that they encourage the employee to gripe about the things that he doesn't like. In analysis you assume that if he doesn't gripe about a condition, it must be satisfactory. Just as in Table 2 it appears reasonable that the assigned ranks of the ten job factors may reflect specific job conditions rather than fixed worker attitudes, so the "My Job Contest" was used to examine company personnel policies and practices. Division by division and plant by plant the entries were analyzed, and the factors mentioned were tabulated. Good pay received many mentions. Security, working conditions, medical plans and services, etc., all received their share. Valuable information was revealed by these tabulations. Those things which received the fewest mentions in a plant often pointed to weak spots. In plant *A* medical facilities were mentioned frequently, in plant *B* scarcely at all. Checkups revealed plant *B* was lacking in some respects in its medical setup.[8]

Workers appreciate good methods, labor-saving devices, and good tools. Vernon Halliday, an external-grinding-machine operator at the Buick plant in Flint makes this clear in the letter which he entered in the General Motors "My Job Contest." [9]

[7] *Ibid.* (inside front cover).

[8] C. E. EVANS and L. N. LASEAU, My Job Contest—An Experiment in New Employee Relations Methods. Part III, *Personnel Psychology*, pp. 311–367, Vol. 2, No. 3, 1949.

[9] "The Worker Speaks," *op. cit.*, pp. 92–94.

Dear Enmy,

Your pa might just as well quit bellyachin'. I ain't quittin' my job at the Buick to be his hired man no more. Cause why? Cause I like this job. Don't fall for his malarky 'bout an inside job bein' bad. There's still plenty of sunshine when I gets thru my day. I don't have to be outdoors all day gettin' a turkey-red neck just to be healthy. Come cold weather, I won't be workin' where I'll be gettin' frost on my punkin or gettin' caught in no cold drizzle rain an' all soggy wet. I'll be dry, an' comftable as if I wuz in your ma's kitchen, when she ain't bakin'. The light I work by comes outa long white tubes an' it is good as bright daylight. An' the air is fresh as your kid brother, almost. I gets paid every Friday, 'sted of gettin' stood up for my money like your pa done to me an' there ain't no sorrer 'bout this payin' bizness, either. The pay is good, too, 'ceptin' Uncle sam horns in for more'n eight dollars Inkome Tax every week, 'sides what he sticks me for when I ain't lookin'. Course I ain't pannin' gold what with board an' room costin' most twenty dollars a week with washin' an' mendin' throwd out. One thing for certin', I got the best tools to work with that's made. Course, I got to keep peckin' along on my job, but the company makes it easier peckin' by puttin' gadjits on my machines that yanks levers 'round, 'sted of me pullin' an' haulin' on 'em. I just push a button, and the gadjit does the yankin'. Naturally, I gets more work done cause I don't get so tired. Workin' with such good tools is like if you an' me was keepin house and I bought you a 'lectric range 'sted of that blast furnace you has to use at home for cookin', an' if I bought you one of them 'lectric gadjits what mixes batter an' beats most everything but the rug. Sure, you could cook more and bake more cake, not havin' to bake your face along with it an' your mashed 'taters would be puffier an' your cakes wouldn't have such big airholes all thru 'em. That's what we call "Co-operatin' for more an' better products," here. If one of them gadjits gets outa whack, I just tells my foreman an' he'll bust his buttons gettin a repair-man or 'lectrician to fix it so I can get buzzin' along again. If a belt on my machines busts, there'll be one just the right size waitin' for me at the crib like they knowed

all along it was going whoocy. Funny thing, too, if I am able to suggest a way to do something better or easier, I can get paid for the idea. Tell that to your pa. 'Member when separatin' all that milk twice a day, aturnin' an' aturnin' on the crank, I suggests to your pa that he get a motor to do the turnin', an he just sez wud that put any more butterfat in the milk? Course not, but it would leave more butterfat on the hired man to do other things needin' doin'. What I like here is the way they save my butterfat for useful work, 'stead of pushin' an' haulin' at things like your pa does. Makes me proud to belong to such a co-operatin' organizashun and proud, too, when I see them shiny new Buicks go whizzin' along, and know the owners won't never have no misery count of any bum work I done on 'em. Course, this is a whopper of a big organizashun. I have to judge the whole of it by the little I can see. Like that game I saw thru a knothole in the fence: only could see the outfielders but I could see 'em moving back or forward, or to the left or right, and I knew they wuz co-operatin' with the coach to get those batters out; an' I just had to believe the part of the team I couldn't see was co-operatin', too. When you come to think about it, this bizness of all working together is awful important. If people all over the world had co-operated, like its done at the Buick, your brother Bill would be home jokin' with your ma, 'sted of her just havin' a pictur to look at, count of Iwo Jima; and your pa wouldn't need no hired help; and I could be savin' all that money I'm payin' out for Inkome Tax, to help buy that little home we has talked about, so much.

With love, an' hope you co-operate.

Vernon Halliday won a new Oldsmobile for this letter. He deserved it, for he put his finger on some very important points that highly paid human relations "experts" often overlook.

Work-flow and Morale

A factor that tends to be ignored by those who write about human relations in industry is the smoothness of work-flow.

Workers who are constantly troubled by breakdowns, needless paper work, errors in routing, delays in receiving parts, unnecessarily tedious methods, etc., can become very unhappy and dissatisfied people. Fat pay envelopes cannot always overcome these feelings of unrest.

Frank, an expert woodcarver in a furniture factory, regretted a slacking off of business in his shop, but there were real rewards in it too. The postwar boom was drawing to a close. Management was becoming more and more interested in both economy of operation and quality of product. Wasting of materials was no longer tolerated. With the return of competition, the company had to emphasize craftsmanship in manufacturing once again. Frank was pleased about that. He hated turning out shoddy products. Once more he could be proud of the divans, sofas, and easy chairs his company was making.

Richardson and Walker, in their study of the operation of the Endicott plant of the International Business Machines Corporation (IBM), say: "Industrial relations begin at the bench . . . A smoother work-flow often means better morale . . . I don't care how high the wages are, or how good the personnel department, a badly managed factory can't have good human relations." [10]

By shifting from a *job shop* operation to the more effective *progressive assembly* system, an increase in morale was brought about in the IBM Endicott plant. While this was not the only factor in increasing the already high morale in this plant, Richardson and Walker think that this adoption of improved work processes made an important contribution to these gratifying results. The new system brought fewer delays, less paper work, more production, and *improved human relations.*

[10] F. L. W. RICHARDSON, JR., and C. R. WALKER, "Human Relations in an Expanding Company," p. 54, Labor and Management Center, Yale University, New Haven, Conn., 1948.

Morale: What It Is and How to Build It

If you check the dictionary definition of the word "morale," you find that it has something to do with the mental condition of groups of people. It is akin to spirit, zeal, hope, confidence, etc. After reading this definition, you might well ask, "I know, but what is morale?"

Perhaps this is the best definition of good morale: *Morale is the attitude held by the individual members of a group which makes them put the achievement of group goals ahead of the achievement of personal goals.* Ed injures his arm on a line plunge. It's a throbbing, aching, pain to him, but he carries the ball on the next play. Bill wanted to be a back, but he was better at guard. Not many headlines there, but it contributed to a winning combination.

There are many spectacular illustrations of good morale in sports, in warfare, in social and religious activities, and in industry too. These are all excellent and inspiring, but what we're aiming for is not spectacular. Rather, we want to help the supervisor to develop in his people attitudes which will enable them to give to their jobs the energy, effort, and interest that people want to give. Yes, people want to give to their jobs a great deal of themselves, but all too often something in the job situation prevents them from giving. The foreman is unworthy, the company is cheap, the union has cautioned them about amount and kind of work they can do. They have had developed in them some suspicious attitudes toward all employers. These and many other attitudes and conditions conspire against the achievement of good morale.

Obtaining good morale is no easy undertaking for the foreman; yet it is primarily his problem. Top management can set policy, but top management cannot contact every employee personally. Morale depends upon the kind and quality of these con-

tacts between management and the worker. The natural front where these two groups interact is at the first line of supervision, be it office manager, foreman, or leadman.

Morale Is an Individual Matter

When we speak of good morale in a group, we mean that most of the people in the group have good morale. Group morale is the outcome of the morale of each individual in the group. Therefore the improvement of group morale must be accomplished by improving the morale of every individual in the group. This is done in large measure by the personal missionary work of the foreman.

Notice that this business of improving morale is a personal, individual thing. There are no magic wands to wave over the group. Group procedures may supplement individual work, but they can never supplant it. Group recreation projects, services, inspirational and educational talks, clubs, etc., all may help; but without the supervisor who is a real leader in there plugging with each individual worker, it is just so much wasted time, effort, and money.

In building morale, the supervisor's job is a salesman's job. What's his product? It's an idea, an attitude, a goal. In order to sell you, he must have samples and demonstrations. The foreman's behavior is his only sample kit. He has to exhibit the attitudes he wants others to have. He has to follow the goals he wants others to accept. He has to believe the things he wants others to believe. Obviously, then, the first step in the development of morale in a group is for the leader of the group to inquire into his own motives and goals. If he himself does not have the enthusiasm, the zest, the confidence, and the hopes that should be developed in his group, his task is an impossible one.

We start, therefore, with the assumption that the supervisor's

goals are all for the good of the organization as a whole.[11] In order for the worker to accept these goals, he must *identify* himself with the company. Just as a man identifies himself with his family, his church, his political party, his lodge, so must he become identified with the organization with which he works. For identification to be possible, the company, of course, must earn the right to expect it. This demands that its policy toward every employee be sincere in its regard for his welfare and fair in its dealings with him.

How to Improve Morale

So much for background. Now let's see just what the supervisor can do to improve morale in his group. We will make some specific suggestions here, but we will not pretend to cover the entire area. "Why not?" you ask. For the simple reason that *every word written in this book is directed in one way or another at the improvement of morale.*

Table 2 shows that steady work or security is generally regarded as one of the most important job satisfaction factors. With steady work, chances of having high morale increase. It is, of course, impossible for the foreman to provide steady work in most cases, because this depends upon economic factors beyond his control. In spite of this, a foreman can build up in his men a feeling of security, which is more important than any guarantee.

The world is full of change. There is no one in the world who is now so secure economically or socially that he cannot tomorrow be deprived of wealth and position. Security in the final analysis lies within the individual. It is a fundamental attitude toward

[11] In the nature of an aside, we can address ourselves to top management. If the foreman does not have acceptable goals from your point of view, you, top management, had better do something about it. What can you do? Just read further.

life. Those who have it feel able to take care of themselves, regardless of adversity. On the other hand, those who lack it worry about losing their jobs even when they are working for the most stable organization. The feeling of job security is intimately related to feelings of self-confidence. For the self-confident person, job security is no real problem. The foreman's function in this matter, then, is not directly concerned with *steady work*, but with building up the feeling of security in his employees. This, in turn, depends upon their feelings of confidence in their ability to handle the day-to-day incidents of life and work. The supervisor can in part provide this feeling of confidence by training his people effectively to do their jobs, by showing them the importance of their jobs to the purpose of organization, and by teaching each of them several jobs so that they are not completely dependent upon just one skill. Knowledge of a variety of jobs is better than money in the bank.

The supervisor can also increase feelings of self-confidence in the worker by demonstrating his own confidence in him. The way in which orders are given, the genuine sincerity with which appreciation is shown, the willingness to see things from the worker's points of view—all are builders of confidence. In addition, the wise supervisor on occasion talks at length with each man about his work, his opportunities, and his progress. Such talks, if conscientiously undertaken, can be of tremendous importance in building morale.

Some Brief Rules for Building Morale

1. Operate an efficient shop. See that work-flow is as good as possible.
2. Be fair and prompt in treatment of grievances.
3. Encourage suggestions, and give public commendations and credit for those accepted.
4. Give praise and recognition for superior performance.

5. Be willing to help all who ask for or need aid in the solution of any difficulty or problem.
6. Let each person know exactly what is expected of him in terms of quantity and quality of work.
7. Keep your promises.
8. Keep employees fully informed in advance about changes that will affect them.
9. Treat every person with consideration and respect.

These few rules, if followed, will lead to the improvement of confidence and morale. Others will be listed and discussed throughout the book.

Participation

The essence of good morale is participation. Participation means "to take part in." One may be a part of a group but not be a participant in its activities. A man may work for a company and yet not feel that he is a real participant in its achievements. Anything which will encourage a sense of belongingness in the organization will make a real contribution toward morale building.

A businessman stayed as a guest of some of his associates in a large private club. As the bellboy took him to his room, they exchanged a few remarks. The bellboy was eager to serve and to please, but was not in the least servile. He seemed to take a real pride in the club. "Last weekend *we* had open house here. *We* served 24 hundred guests and visitors." The bellboy was proud of the accomplishment.

Later the businessman had lunch in the dining room of the same club. After his meal he said to the waitress, "My, that was excellent food."

"Yes, *they* do serve good dinners here," was her reply.

Notice that the bellboy said "we," while the waitress said "they." Which one identified himself more with the organization

whom they both worked? Which one felt more like a real rticipant in its activities? The businessman couldn't say for e; but if he were to bet, he would certainly put his money on bellboy. Do your workers say, "*They* do such and such here"? e "we" feeling isn't just a factor in high morale—it *is* high rale.

Genuine feelings of participation are not fostered by giving, charity, or by a one-way stream of benefits. Unions have been own to reject substantial financial benefits simply because they d no hand in determining the amount or the procedure by ich the benefits were to be distributed. One manufacturer ceeded to build a beautiful recreation hall for his employees thout consulting them. Somewhere along the line he missed "human-relations" boat. It finally became apparent that his rkers would have nothing to do with the project. In disgust finally had the almost completed building torn down rather an leave it as an empty monument to his own failure to win workers. *Good morale cannot be bought.*

Employee participation is not a frivolous goal. It is sound nagement, and it pays off in dollars and cents. Before it can effective, management must have faith in its employees' abil-es and soundness of judgment to work out problem solutions at benefit both the company and the workers. The results are t often disappointing.

Dr. Alfred J. Marrow, forward-looking president of the Har-od Manufacturing Company, has demonstrated that such faith the employee's determination to do the right thing for all con-rned is not misplaced.[12] At Harwood, a textile company, poor oducers aren't called on the carpet by supervisors. That method, commonly used elsewhere, simply puts the worker on the fensive because he searches for convincing reasons why he

[12] See Industrial Psychology Pays in This Plant, *Modern Industry*, Vol. 16, . 1, pp. 67–78, 1948.

can't do better. The erring worker may even convince his supervisor that he can't do better. In any event, he convinces himself that he has been unfairly treated, and he harbors feelings of ill will and aggressive tendencies that are not easily overcome.

Supervisors at Harwood, trained by Marrow and his staff, use a different approach. First, the employee is informed of the difficulty in a friendly matter-of-fact way. He is encouraged to give his version of the problem in a permissive atmosphere that enables him to state the case without fear of censure. Then foreman and worker put their heads together to see what can be done. The employee is given a free rein to suggest the solution. What's more, the supervisor can have some assurance that the corrective measures will be carried out without constantly applying pressure. This is participation in its simplest form. The employee participates in a supervisory decision and accepts responsibility for carrying it out.

At Harwood the effectiveness of participation in the solution of production problems was demonstrated by scientific experiment. The following is an account of this experiment: [13]

> Five groups of workers whose jobs' methods and rates were to be changed were selected. The groups were similar in size, the degree of change was the same, and the amount of in-group feeling was identical.
>
> The control group went through the usual factory routine. The production department modified the job; a new piece rate was set. No new skills were required. Members of the group were called together, the reasons for the change explained, questions were answered.
>
> Four experimental groups were changed by using democratic-participation methods. Each was told that changes in the job were required by the sales department.
>
> Agreement was reached that savings could be effected by removing some fancy work from the garments involved. Manage-

[13] *Ibid.*, p. 74.

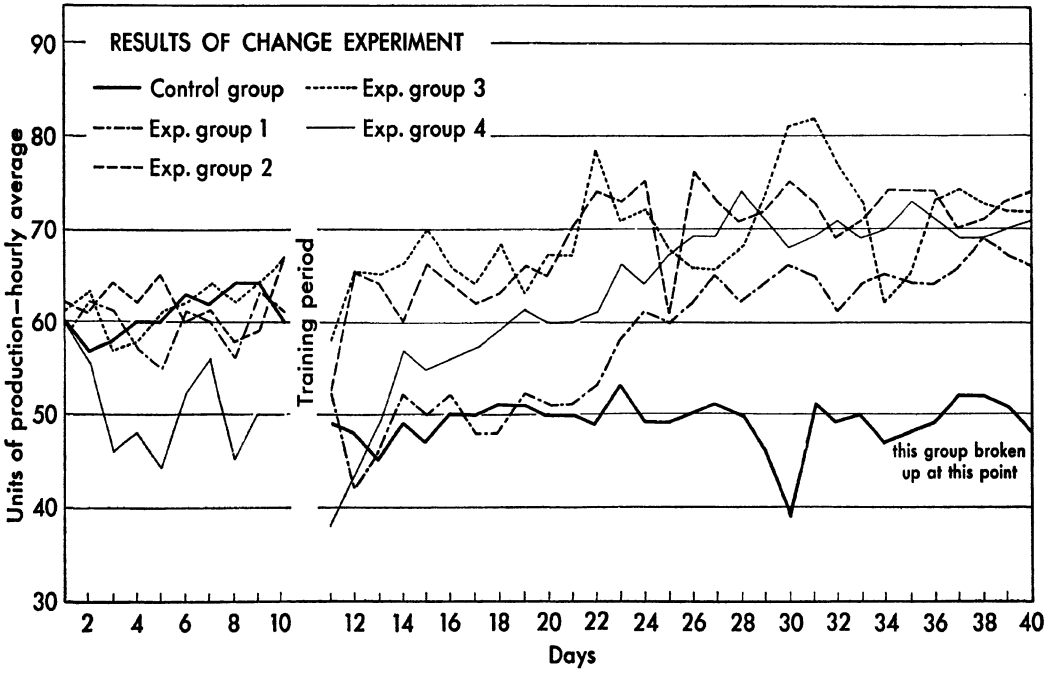


FIG. 2. "Industrial democracy—letting workers take part in decisions—is charted in production records of five groups of workers. Control group was merely given job change, new rate; after two-week training period (gap in curve) never reached prechange levels. Other four groups had a voice in making the change, soon exceeded the standard." (From Industrial Psychology Pays in This Plant, *Modern Industry*, Vol. 16, No. 1, p. 68, July 15, 1948.)

ment suggested that the groups study the job as then done and seek to eliminate unnecessary work. The group then chose two operators to be specially trained. Their work was time-studied, and a new rate was set. These operators explained the new method to the rest of the group and assisted in training other operators.

Members of these groups were soon talking about "our job" and "our rate." Their suggestions at meetings popped fast.

The relearning curves of the five groups are charted on Fig. 2. The control group resisted the change. In forty days, 17 per cent of the group quit. Grievances were filed, although when the rate was checked, it was found to be "loose."

The four groups that were made a part of management in determining the change showed fine recovery. There were no quits in these groups, and production actually went over the prechange averages of the group.

It is on the basis of this and similar experiments that Dr. Marrow and his associates are committed to group decisions and group meetings at all ranks.

In Summary

In this chapter we have tried to show that things are not always what they seem to be. The casual observer, looking at the human relations picture in industry, often fails in his interpretation of what he observes because he fails to look behind the scenes. Only by knowing what the worker thinks and what his attitudes are can we achieve real and lasting harmony in human relations in business and industry. We have tried to show that proper consideration of the worker as an individual can lead to more and better production. This pays off in dollars and cents to all concerned—employer, employee, consumer, and stockholder.

In our next chapter we hope to continue this analysis by showing how the individual reacts in many different situations, particularly in those all-too-frequent situations in which he doesn't get what he thinks he wants.

QUESTIONS FOR DISCUSSION

1. Identical personnel plans were put in operation in two different manufacturing plants. Would you expect the plans to affect the workers in both plants in the same way? Explain.
2. Give an illustration, other than those in the chapter, of ways in which the person influences the nature of the stimulus acting upon him.
3. Why doesn't the dissatisfied worker quit his job? Should he be fired as a troublemaker or as a potential troublemaker?
4. Can we attribute the production improvement, shown in the Western Electric study, to increased job skill brought about by the practice?
5. List the ways in which the supervisor learns what the workers are thinking.
6. Would knowledge gained through an employee-opinion survey help you on your job? In what ways?
7. In what ways could a poorly worded opinion-attitude survey do damage to employee morale?
8. Construct a brief employee-opinion questionnaire that could be used appropriately in your shop or office.
9. What do *you* think workers want from their jobs?

*

FIVE

Dynamics of Behavior— Motivation and Frustration

Foreman Bill Hayes had a problem on his hands. Both Joe and Bill were good workers. Bill had been with the company longer and had more experience, but Joe seemed to be smarter. He learned faster and seemed more adaptable. One of them was going to be promoted to leadman, and it was up to Foreman Hayes to decide which it would be.

Either man would probably do the job well enough; but there was only one job, and only one man could fill it. Consequently, Foreman Hayes was more worried about the effects of his decision upon the loser than about the competence of the man selected. After some very serious thinking, the decision finally went to Joe. The foreman explained as best he could to Bill. He noticed no change in Bill's work, nor did Bill seem adversely affected in any way. Foreman Hayes was relieved that everything had turned out so well. Four months later, Bill quit and took another job. During the exit interview, Bill said the company had treated him all right, but he was very glad to leave.

"Somehow," he said, "I feel I'll never get ahead in this place. I'm glad that I won't have to work here any more." This is a simple story. It's not dramatic, but it's typical of the millions

of incidents in the daily lives of workers that often go unnoticed by outsiders, even though each one of these incidents may have lifelong implications as far as the employee is concerned. Why did Bill quit? Why did he feel as he did toward his company? Even Bill couldn't explain to himself why he felt as he did. Sure, he understood why he didn't get the promotion. He was fair-minded. He liked Joe. But here is a problem that goes beyond reason. It is a problem whose solution lies in the irrational realm of emotion, but it may be said of the *apparent* irrationality of emotion that only on the surface does it defy reason. To those who understand, emotion influences behavior in a logical and even precise way.

When we say that we don't understand why Bill did this or Joe said that, we usually mean that Bill or Joe's actions can't be explained in terms of obvious and reasonable causes, but that does not mean that these actions cannot be explained. In this chapter we hope to develop some basic principles for the understanding of behavior. We cannot cover the subject completely, but to those who learn the lesson well will be given a useful key to the understanding of their fellow men.

In some ways, this is the most important section of the book, yet here again we must remember that our entire discussion aims in one way or another at understanding why we act as we do.

We are not alone in emphasizing the importance of understanding behavior. Here is what one writer says:

> Slowly, surely, and encouragingly, the eyes of company leaders focus on the basic cause for many industrial problems.
> It is, simply: *failure to understand what makes people tick.*
> If a magical radar could sweep across all of industry's ills—from giant plagues like nationwide strikes to mild aches like a second vice-president's huffy resignation—its screen would spot this common cause.[1]

[1] Editorial in *Modern Industry*, Vol. 18, No. 4, p. 37, Oct. 15, 1949.

Man Wants to Be Useful

Let's get at the problem of furthering our understanding of behavior. In the last chapter, morale and job satisfaction were discussed. We saw that this involved finding out a great deal about what people want. What people want and need, and their striving after these things, is what we mean by *motivation.* We need not concern ourselves here with the basic needs such as hunger, thirst, sex, elimination, etc., important as these things are in life. Rather we shall concern ourselves with those peculiarly human wants which mark us as creatures apart in the animal kingdom. Some of these wants are difficult to name and more difficult to define. However, experts generally agree, regardless of the terminology they use, that somewhere in each man exists the desire to be a useful and wanted member of some group or society. Sometimes this is called a desire for pre-eminence, that is, to stand out as a leader or valued person in the group. Sometimes it is described as a desire for conformity. In this case, the emphasis is laid upon belonging to the group or community and abiding by its rules and customs.

Regardless of fine distinctions, this is the fundamental distinguishing feature in man's motivational make-up: *Within each of us exists the fundamental desire or motive to be a useful, worthwhile, generally accepted* individual *in his community or group.* If there are individuals who do not possess this desire, they are few in number and may be regarded as sick or as psychological cripples.

Human beings are constantly in want. They are thirsty and want drink; they are hungry and want food; they are cold and want clothes; they are tired and want rest; they are poor and want money; they are lowly and want power and prestige. For each of man's wants there is a goal—something that will satisfy his needs. Consequently, most of our actions, if not all, are goal-

seeking or motivated. As discussed in the previous chapter, the good foreman or supervisor attempts to work with his men within the framework of their wants and needs. He appeals to them in terms of *their* motives rather than in terms of his own. He attempts to provide an atmosphere in which worker wants may be satisfied.

To be practical, however, let it be understood that in making these attempts the foreman sets for himself an impossible task. None but the dead is completely satisfied. Life is a process in which needs constantly arise and demand satisfaction.

This being the case, it is important that the supervisor not only recognizes the necessity for trying to satisfy the needs of his workers, but it is equally important that he understands what happens when the goals of motivated behavior cannot be obtained.

Frustration

Bill wanted to be leadman. Joe got the job. Had Bill gotten the job, certain of his goals would have been satisfied. Certainly his desire for prestige or pre-eminence would have received some satisfaction. The job would have meant an increase in wages. This could have led to the satisfaction of other desires. But Bill didn't get the job. Consequently a number of his important wants remained unsatisfied. We shall refer to this failure to reach goals with the word "frustration." This word, and what it stands for, will help you explain and understand a great deal about peoples' actions that would otherwise appear to defy understanding.

Conflict-Frustration Situations—Three Types

1. Any time we are prevented from doing what we want to do we experience frustration. Sometimes it's because we want to do two things and can't do both. We want a fat savings account in

the bank, and we also want a new car and nice clothes. It's a case of not being able to have your cake and eat it too. If you buy the car—no bank account. If you build up your bank account —no car. While you're in the process of making up your mind, these two desires are in conflict. Neither want is being satisfied; both are frustrated. After you make your decision, one of your wants is satisfied, the other frustrated.

2. On the other hand, you might find yourself between the devil and the deep blue sea. You don't want to lose your job, and you don't like the way your boss has been treating you. What to do? Again you have your wants in conflict; and regardless of your choice, some frustration will result.

3. There remains one other common type of conflict. Your goal is unattainable because something prevents you from reaching it. You want to advance in your work, but you lack education or training. You would like your department to make a shining production record, but you can't get your men to cooperate. Something stands in your way as a barrier between you and your goal. To the extent that you are prevented by this barrier from reaching your goal, to that extent you are frustrated.

Adjustment Mechanisms

What happens when we can't get what we want? What happens when we knock our heads against these barriers that seem to hold us back? This much we know. There are five general ways in which people commonly meet the problem of conflict and frustration. Here they are:

1. Problem-solving behavior
2. Resignation
3. Detour behavior
4. Leaving the field
5. Aggression

1. *Problem-solving Behavior.* This is the most desirable way of meeting frustration. We can with some success train ourselves to look at our personal problems objectively, that is, to base our decisions upon reasoned analysis of the situation. Unfortunately, we do this less often than we like to think.

The assistant dean of the evening school of a large metropolitan university relates this case as being typical of many. Glenn H., age 31, said, during a conference with the dean, that he needed help in lining up courses which would best fill his needs. He had advanced as far as he thought possible in his work at the ABC Manufacturing Company. With his present education he needed at least two years of college, with a heavy emphasis on mathematics and related subjects, in order to be considered eligible for advancement. For two years he had been worrying about his lack of opportunity. It was not until he made a systematic study of his situation, obtained information from his company concerning its advancement policy, and finally plotted several alternative courses of action that he hit upon his present solution. In this case the solution was simply to try to overcome his educational handicap by taking evening courses at the university. Four years later, and after considerable hard work, Glenn achieved the sought-for advancement.

2. *Resignation.* The following comments come from the notes of a counselor in a large industrial concern:

> Victor K. was contacted at his bench in Department C. by this counselor. In the course of the conversation that followed, it appeared to the counselor that Victor was saying only those things that he thought the counselor would like to hear. Occasionally, however, an underlying note of resignation tinged with resentment toward the company was observed. For example, Victor said, "Oh, I like the company and my job fine." And then, almost as an afterthought, he added, "What else can I do, I'd better like it."
>
> Victor apparently does his job, not well, but better than the

average replacement would do it. While he does not complain, his attitude toward his work is that of patient suffering.

Records show that at one time Victor was ambitious and energetic in his work. He had, however, been held back from normal promotion during the depression by economic circumstances beyond his control. At one time he apparently very seriously considered quitting, but because of heavy family responsibilities never carried the idea through. After that, his interest in his work began to decline. It seems as though he is simply going to sit it out until he is able to retire. Victor works for the company, but somehow no longer seems to consider himself a part of it.

Employees like Victor are liabilities to any company or department. Once they have given up, in the face of the obstacles they meet on the job or in life outside the working hours, it is difficult to build up their morale to the point where company objectives and goals are really important to them. This, of course, is bad enough, but close observation of people such as Victor almost always shows resentment toward something. There is a sort of passive resistance to change. They are difficult to deal with because new ideas do not excite and stimulate them. The person who is resigned to it all is an unhappy person. Indeed, it may be impossible for him to be otherwise.

Later in this discussion, the relationship between frustration and aggression will be pointed out. We will show how frustrations bring on tendencies to do harm towards others by word or deed. These tendencies may remain just that, rarely fully revealing themselves on the surface, yet smoldering underneath, ready to be directed at each available object—be it person or thing. It seems entirely reasonable that people who appear resigned in the face of barriers and obstacles are simply masking underlying hostilities and aggressions.

In summary, let it be said that in some individuals the inability to reach important goals leads to a condition in which the

person no longer apparently seeks that goal. He seems resigned to his lot. Here, as is always the case, the best medicine is preventive medicine; that is, help the person use problem-solving methods of analysis and objective evaluation to solve his personal problems. If, however, it is too late to take preventive steps, the problem is one of restimulating the worker to strive either for his old goal or toward some new but desirable goal.

In a survey of executive manpower undertaken by a large manufacturing concern, the case of Henry W. was brought before the company president and the executive vice-president in charge of personnel. Henry, age fifty-one, now an assistant chief of a large and important department, had for the past five years shown none of the vigor of action that had been characteristic during his previous twenty years with the firm. Because of his long years of excellent work, it was decided that no hasty decision would be made without thorough investigation. The matter was discussed with Henry's superior, but no leads seemed to come from this man other than that Henry's work was satisfactory but not inspired. The matter was discussed at length with Henry himself. Here finally came the startling revelation that Henry had been given to understand by his superior that advancement was completely impossible for him in the firm. His chief had told him that he had a good job commensurate with his abilities, but that he should expect to go no farther. In telling him this, the executive had gone far beyond the bounds of good judgment. Here was a barrier, firmly implanted in Henry's path, which he felt he could neither go over nor go around. The result—resignation to his lot and inferior performance on the job. The solution—the company president told Henry that no such limitation existed in his mind about Henry's future. He further told Henry that it was his firm conviction that an executive could never stand still. He either plunged ahead seeking new responsibilities and advancement, or inevitably he slipped back.

Henry was transferred from his former supervisor's department and given a six-month trial. He succeeded gloriously. Within a year he had already been advanced several notches above the position held by his old supervisor.

Let the supervisor ask himself, "Before which of my men am I placing a barrier just as Henry's boss placed in his pathway? And why am I doing it? Am I afraid that the workers under my supervision will become more valuable to the company than I am myself?"

In answering these questions, keep in mind always that the chief supervisory function is to bring forth the best in each and every person being supervised. The supervisor does not produce *things*; the supervisor produces *producers.*

3. *Detour Behavior.* A chicken beats its wings against a six-foot section of fence to get at food on the other side. His repeated attempts do nothing more than shake a few feathers loose. A dog is placed behind the same fence and sees a juicy bone plainly in view on the other side. After one or two attempts to go directly to the bone, he simply walks around the open end of the fence and happily eats his bone. In one sense at least, the dog is exhibiting detour behavior. The direct way of reaching his goal was barred to him, so he simply found another way to get there. This illustration is, however, disarmingly simple; for the detours that human beings may sometimes take in achieving goals are often circuitous and obscure.

Why does Ethel lie? What does she gain from it? It isn't as though she told lies deliberately to get the advantage of some other person. They are simple, harmless, casual untruths; but unfortunately for Ethel, her friends in the shop begin to shun her and look queerly at each other when her name comes up. She's a good worker too, one of the best. Ethel's supervisor would be very happy if she knew the answer, and still more happy if she thought she could do something about it. It was a long time

before she began to understand something of Ethel's problems.

Ethel was smart but not well-educated. She was a factory worker but would have much preferred to be in the office. Unfortunately, her lack of education and training made it impossible for her to secure the secretarial job she desired. However, Ethel wanted education less for the knowledge than for the prestige and social position often associated with academic training. Educated people are smart; they know the answers. Ethel wants to be like educated people; so she assumes she has the answers even when she doesn't. Consequently, Ethel has an opinion on every issue, from an unexpected layoff to the political objectives of the British Empire. One needs facts to support opinions. Not having the facts on hand is no misfortune to Ethel. She simply manufactures them to fit the case.

Thus in Ethel's case the detour was an unfortunate symptom of her thwarted desire to have a higher position in her group than she now enjoyed. Unfortunately it backfired as detour behavior often does. Thus Ethel, although she was not quite aware of it, was beginning to slide down the ladder of social acceptance at an alarming rate.

Although we cannot dwell long upon the point, it is well for us to note that many physical aches and pains that some of us "enjoy" are really examples of detour behavior. Some of us have learned in childhood that being sick furnishes us with an acceptable excuse for getting out of unpleasant tasks. Ken wakes up in the morning with a sick headache. His wife knows he's not kidding. He looks bad, acts bad, and feels bad. No work for Ken today. His wife calls the boss. Sure, he understands. Ken's health comes first, although he was particularly counting on Ken today. They'll just have to get along without Ken's help on that inventory.

Later in the morning, Ken feels much better. He feels a little

guilty about staying home, but it's too late to go to work now. Fortunately for Ken and his boss this was a rare incident. It can become a habit.

There is no doubt that Ken's headache was real. If you could measure pain directly, you would certainly find that Ken's head pained him. However, when you begin to know just how much Ken disliked taking inventory, you might begin to suspect the basic cause of Ken's sickness.

Like all of us, Ken has a set of ideals. In a sense they form the framework of Ken's own picture of himself. If we could see Ken's self-picture, we'd see a hard-working individual who conscientiously tries to carry his share of the burden. Either at home or in the shop, here's a man who works hard for what he gets and doesn't make excuses for himself if he can help it. That's part of Ken's picture. In a sense we can call it a goal, because Ken measures all of his actions in terms of whether or not this picture is kept intact. Avoiding work, no matter how unpleasant, just is not a part of it.

On the other hand, Ken has another competing "goal." He doesn't want to take that inventory. For the past week he's been worried over a possible parts shortage that he can't explain. He's kept it to himself.

Nature solved Ken's problem for him that morning. By being given his headache Ken was at once able to avoid the inventory and still able to maintain, for the moment at least, the very nice picture he had painted of himself. An odd detour to follow, but certainly a well-traveled one.

Men and women have adopted painful and serious physical disorders, far worse than Ken's, in order to evade conflict situations.

Soldiers become paralyzed or blind, or begin to act the part of children. Shell shock, now more commonly known as "combat fatigue," is just as likely, if indeed not more likely, to strike

far behind the scene of battle as on the firing line. These are not, however, exclusive military disorders, although the stress of wartime military life may increase the incidence of their occurrence. Whenever and wherever there is psychological conflict, with its attendant frustrations, one is likely to find these conflicts converted to physical symptoms. We are not speaking of people that would be called insane. We are now speaking of ourselves, each and every one of us. Some of us are able to stand the siege of conflict and frustration better than others, but in all of us there are limits at which the strain begins to tell. In some of us this point is reached more easily than in others. There is no good reason to doubt that physical and mental breakdown would occur in even the best constitutions when the tension of frustration is increased beyond the individual's limit. Health, in a very real sense, depends in part, and an important part at that, upon the psychological outlook of the individual. We shall have more to say about this point later in the chapter.

4. *Leaving the Field.* How many times have you looked at your job and fervently wished you could quit it then and there? For some reason or another you didn't get what you wanted. Somehow you missed the satisfaction that you feel a job should give. No one seemed to recognize the difficulties of your job as supervisor. The men you have under you think you've got it easy because you don't have to stand in front of a jarring press eight hours a day. Your boss seems to have his own troubles. All he expects from you is results. Somehow your recommendations are rarely carried out. In other words, your job doesn't look too good to you. You can see plainly each and every disadvantage. But the other fellow's job—that's another story. Or there's that job in Detroit or Chicago that you think you can get. Somehow they all seem better.

Maybe you've been in this situation. Most of us have at one time or another, particularly around age forty, when we begin

to look back to sum up what we have accomplished and at the same time to look forward to the possibilities the future holds for us. Here we have our frustrations clearly enough defined. Let's assume for the moment that you did quit and did take that other job, possibly in another city. Quitting your job in the face of such conflict is what would be called in psychological parlance, "leaving the field."

Is this form of adjustment good or bad? It all depends upon the circumstances. Its chances of success depend upon the major source of the conflict and frustration. If your frustration results from your own doing, if it is the result of your own peculiar psychological make-up, in all probability the only good such a change will do will be to shift the incidental figures in the drama. The new supervisor who seems so good at a distance again becomes your old boss in another form, not because of what he does or says, but because you resent authority or because you are seeking recognition that you cannot rightfully earn. You have left old rules and regulations that displeased you only to accept new ones that eventually become equally odious. In this case, leaving the field is no solution to the conflict. If, on the other hand, your own personality is not the major source of conflict, and the conflict does in reality stem from the uniquely unfavorable situation in which you find yourself, then leaving the field may represent a real problem solution. Which happens to be the case is often impossible for the individual to determine.

It is not necessary, however, to change jobs or to move away in order to "leave the field" in the face of frustration. Whether we know it or not, each of us uses this method of problem solving many, many times in the course of our daily lives. Some workers say that simple routine assembly work is deadly and dull. They say they can't stand the monotony, that it gives their brains nothing to do. Others like it and enjoy it. They like it because such routine work allows their imaginations free play. In their

thoughts and daydreams they escape from their jobs and indeed from the problems of living.

One worker, new to shop work, was hired by an electronics manufacturer during the war to solder electrical connections on airplane instrument panels. This worker, a mature and intelligent woman, was surprised to find how enjoyable this concrete and specific work was. She soon became so expert that she scarcely needed to think about what she was doing. She was busy, conscientious, doing important war work, and her mind was free for daydreams and idle reverie. Because of her skill, she was later transferred to inspection work, inspecting the instrument panels she had previously helped assemble. Somewhat to her surprise, and certainly to the surprise of the personnel man who had arranged her transfer, she neither liked this job nor did she do particularly well at it. She knew how to inspect; she knew what to look for. She was extremely conscientious, but the work seemed tedious and confining. It required the utmost in attention. A slip might cost a pilot's life. There could be no mind wandering here.

Because she knew her job well, even though she was not performing it at the speed which could be considered entirely satisfactory, the personnel man decided to capitalize on her ability, experience, and intelligence. He made her a trainer of inspectors. Somewhat to her own surprise, she did exceedingly well at this job and continued at it until the close of the war.

In analyzing the situation, the personnel man decided that the assembly job had been satisfactory to her because it allowed her to use her nimble imagination to escape from what would be otherwise a very dull routine task. On the other hand, she was unsuccessful in inspection work because, although this job was equally routine, it required such intense mental concentration that her imagination was never free to allow her, at least in fantasy, to "leave the field." Futhermore, the monotonous characteristics of the job were emphasized by the fact that it did not chal-

lenge either her intellect or imagination. He reasoned further that she was successful in teaching inspectors because this job was interesting in and of itself. It required the full exercise of this worker's abilities to solve the problems of teaching. Furthermore, since it meant dealing with people rather than with things, for this woman at least it could not be monotonous.

You can readily see from the above discussion that leaving the field in the face of conflict may sometimes be a satisfactory method of adjustment but that often it is a woefully inadequate attempt on the part of the individual to solve his problems. In serious cases, it simply prolongs the agony of doubt and conflict. Many people spend entire lifetimes running away from real and imagined difficulties. Some of the most difficult personnel problems that face the supervisor are caused by individuals who chronically adopt this method of problem solution. It is the root of much absenteeism. Much unnecessary turnover is caused by it. Indeed, much of the time spent at the water cooler and in the washroom is a simple manifestation of this habit of behavior. Then, too, the employee who is always butting into things which do not concern him, who is always willing to spend time on other people's problems even though he is uninvited, is often simply running away from his own problems. This approach to conflict solution is behind many specific mechanisms of behavior which shall be discussed in more detail below.

5. *Aggression.* We have often heard it said that human nature is belligerent and aggressive, that it is self-seeking. Those who say that wars are inevitable point to this human characteristic as a basic argument for their belief.

Does man have an inborn or inherited desire to be destructive and combative? Some say yes and that, therefore, nothing can be done to change man's aggressiveness. The difficulty with such a point of view is that it leads us nowhere and fails to give us an understanding of the reasons behind aggression. It teaches us

frankly that no control against aggression is possible except the exercise of greater force. Fortunately, however, within the past few years a systematic and logical attack upon this problem has been made. Although still in its early stages, our understanding of the fundamental causes of aggressions has been considerably advanced. It is our intention here to summarize for the supervisor something of the underlying nature of aggression and combativeness in man, so that he may approach the problem of human leadership with more understanding and hope for success than was heretofore possible. To do this, we shall rely heavily upon the findings of scientists working at Yale's Institute of Human Relations [2] and upon the work of Professor Maier of the University of Michigan.[3]

First, let us understand exactly what we mean by "aggression" as it is used in this discussion. Not only is it hostile behavior aimed at harming other persons or things, but it also includes tendencies to commit these acts of aggression. These may be only thoughts or words or even feelings not yet put into words. All aggressions have this in common: *harmful intentions against something,* whether expressed or not.

That a fight on a picket line is aggressive is unmistakable, but the mere passing along of a malicious rumor may often be done without revealing its fundamental aggressiveness.

Frustration and aggression are intimately bound together. This relationship is expressed in two statements, which, though they seem broad and sweeping, can be accepted as true. The first of these is that *all aggression stems from frustration.* This is a powerful statement or concept. It means, in other words, that every belligerent act is born and bred in the failure of the in-

[2] JOHN DOLLARD *et al.*, "Frustration and Aggression," Yale University Press, New Haven, 1939.

[3] N. R. F. MAIER, "Frustration—The Study of Behavior without a Goal," McGraw-Hill Book Company, Inc., New York, 1949.

Such aggressions as this picket-line scuffle stem from many kinds of frustration arising both in and outside the shop. Here tension mounted to the breaking point. Do you think this incident will lead to more or to less aggressive behavior? (*Wide World Photo.*)

dividual who commits it to reach some desired goal. Thus, every unkind word is as revealing about the person who makes it as it is about the object or person against whom it is made; indeed, it is often more revealing. Every emotional blowup exhibited by a person reveals, first of all, that somehow, somewhere he has experienced intolerable frustration. The supervisor who chronically bawls out his men reveals his own unendurable failure to reach some personal goal.

There are, of course, vast individual differences between people in the amount of frustration that they can stand before they are forced into aggressive behavior. But does this mean that as long as we can detect no belligerency in behavior no aggressive tendencies are there? It does not. Here is where we introduce our

second important relationship between frustration and aggression, namely, that *all frustration leads to aggression.*

All frustration? But, you say, if frustration is simply failure to reach some personal goal, should not aggression, should not fighting, should not unpleasantness in human relations be more prevalent than they are? John misses his bus in the morning. The delay is inconsequential. Does a simple thing like this lead to aggression? You break a pencil point in writing and cannot continue until you sharpen it again. Does this stimulate one to aggression? The answer is yes, but fortunately these minor frustrations do not often lead immediately to open aggressions; the aggressive tendencies they start are often dissipated before calm and rational behavior is disrupted.

Minor frustrations, no matter how inconsequential, do start aggressive tendencies; but fortunately the majority of these tendencies do not develop into aggressive behavior because we hold them back, or inhibit, them. Furthermore, we must recognize that the strength of the tendencies to commit aggressions is influenced by various factors. These factors are three in number:

a. The stronger the desire to reach a goal, the greater will be the tendency to commit aggression if the goal-seeking behavior is interrupted. It is four-thirty in the afternoon. The whistle blows at five. John must finish packing a large shipment of amplifiers before the end of the shift. He should have plenty of time, but he is working at top speed to meet his girl, who is probably even now waiting for him at the company gate. His supervisor comes by and notices an error in invoicing that makes it necessary to repack the entire shipment. How does John react in this situation? If we assume that John wants to meet his girl pretty badly at five o'clock, we might expect a strong show of aggression. Actually, he's pretty mad, but all his supervisor sees is a change of expression on his face. He also notices that John throws the carton he's working on down to the floor in an exasperated manner.

b. The more completely the individual is blocked from reaching his goal, the greater will be the tendency for an aggression to show itself. Minutes later John's supervisor comes back and tells him that the error he discovered was a very serious one. Since the shipment must be prepared that evening, he tells John he'll have to work overtime to get it done—a matter of three or four hours at the least. John's date for that evening is off. His immediate goal of a pleasant evening isn't simply delayed; it's completely blocked. This time John complains openly. His supervisor is at first sympathetic and understanding, but John's remarks about the general way in which the company is run and his observations about the competence of its supervisors become more and more pointed.

c. Finally, the tendencies to commit aggressions are increased in direct proportion to the number of goals that are blocked. So far, John has had one goal completely blocked. That is, he is unable to go on the date he had planned and looked forward to with so much pleasure. Now word comes back to John that his girl doesn't appreciate being "stood-up" at all. In fact, she sends back word that this is the last straw. He either meets her as planned, or all is over between them. To top this off, John's superintendent has taken exception to his remarks of the last few minutes and begins to point out to him that his job performance has not been all that it should be.

Now, as for satisfying personal goals, John is in a pretty miserable situation. His immediate goal of a pleasurable evening has been blocked; his typically male feeling that he was an indispensable part in the life of an attractive young girl has been shattered. His supervisor has dealt a severe blow to his feeling of competence on the job and, in so doing, has threatened his job security. We should expect John to become even more openly aggressive than he has been because of the number of frustrations he has experienced. Indeed, his tendencies toward aggression are

just as strong as any he has ever experienced, but somehow he manages to hold himself in. He completes his job that evening as ordered. His supervisor feels that another crisis has been passed and hopes to hear no more of it.

What has happened here illustrates another fact about frustration and aggression. We can say that John has inhibited, that is, held back, any open and direct act of aggression. At least for the moment. Why?

The extent to which acts of aggression are inhibited depends upon the amount of punishment that the frustrated person expects if he carries the acts through. John knew that if he went any farther, not only would he lose his girl, but he would also lose his job. This was more than he cared to bargain for, so he held himself in. He felt he could not afford the luxury of punching his supervisor in the nose or, for that matter, of telling him exactly how he felt about the whole situation.

Unfortunately, aggressive tendencies must come out some way. If they aren't expressed in one way or another, the intensity with which they are felt is increased. Briefly, the inhibition of aggressive *acts* increases frustration and thereby increases still farther aggressive *tendencies.*

Right now, John is a seething mass of hostile feeling. These hostile feelings, or aggressive tendencies, have to be directed at something. What caused all John's trouble anyway? A clerical error by some unknown person in the shipping department; a supervisor who discovered the error and did his simple duty; a girl who wouldn't wait for him; a company who hired incompetent shipping clerks and exasperating supervisors. These are some of the sources of John's frustrations. There may be other sources we can never know about unless we know the history of John's life in intimate detail. In general, we can say that John's aggressive feelings will be directed toward whichever of these things he feels to be the source of his present difficulties, but that his

aggressive acts, if they ever come into being, will be directed toward any readily available objects or persons that have the misfortune of encountering John while he is in his present condition. These will become the objects of his aggression whether or not they played any part in the sequence of events which brought about these unhappy circumstances.

For the moment John needs to do something. Powerful forces are at work within him. Action is necessary for their release. John was afraid of the consequences of releasing these feelings against his supervisor. His girl was not available, nor did it appear that she would be in the near future. He didn't even know who made the error that started this chain of events. That left only the company. But just what is a company? For the moment, the only immediate targets for his aggression were his amplifiers, cartons, and other packing materials. For a while it looked as though there were going to be some pretty battered amplifiers shipped to some unsuspecting distributor. John held himself in, however, because it would be entirely too easy to be blamed for any damage done.

John arrived home at ten o'clock that night. He had driven too fast and had narrowly missed an accident when he went through a stop sign. His older brother casually asked him where he had been. John said it was none of his business and then looked closely at the shirt his brother was wearing. It was John's shirt. John hit the ceiling. All the aggressions John had patiently stored up during the past hours came rushing forth. His brother was alarmed at the flow of verbal abuse directed against him. With the admirable patience that often seems to be a built-in quality of older brothers, he didn't reply in kind. To be sure, he showed some exasperation. Finally, he took off the disputed shirt and promised John he'd see that it was laundered. However, he didn't try to calm John down, nor did he try to aggravate him any

farther. He let the outburst go on until it started to subside by itself.

Before long, John was pacing excitedly up and down the room, taking his brother into full confidence concerning the events of the last few hours. John told his brother all the things he would have liked to say to his boss, but somehow hadn't thought to say in time or, to be more frank, hadn't dared to say. Harsh sentiments were also expressed about his erstwhile girl friend. The older brother listened with considerable interest. His comments were few. While he showed no approval of John's remarks, he was careful not to indicate any disagreement. John wound up his tirade by saying, "Well, I feel a little better now. I'm sorry I got so sore at you for wearing that shirt. I guess you can understands how upset I was."

John did experience relief. The most fortunate thing for him on this day was that he had a tolerant brother, who not only let himself be used as an object of wrath but also patiently listened through John's troubles. In Chap. 13, when we discuss counseling, we'll have a lot more to say about the role John's brother played in this episode. For the moment, however, let's carry our analysis of frustration and aggression farther in John's case.

Aggressions are frequently displaced. John felt that his troubles were principally caused by his supervisor and his girl. Against neither of them, however, could he vent his aggressive feelings. When John stepped into his car that night, his feelings had just about reached the bursting point. He drove home carelessly, too fast, and with too much disregard for the rights of others. For the moment, John had in his hand a powerful and dangerous instrument with which to relieve his aggressions—his car. Was his disregard of the stop sign a simple oversight? Not likely. All the way home John was talking to the drivers of other cars on

the road. Fortunately, they couldn't hear him, because what he was saying was not pleasant. "Get over there, you dope. Who taught you to drive? Look out there, or I'll wrap a fender around your neck. What's the matter, asleep at the wheel? Can't you see that light's changed?"

John was releasing his aggressions against other drivers. For the moment, they were the innocent bystanders in this little play. His aggressive tendencies, built up in an entirely foreign situation, were being *displaced* to the cars and drivers who had the misfortune of sharing the road with John. Here is an important and recently recognized cause of accidents. We'll come back to this point later in the book.

When John met his brother and reacted so vehemently, we saw a triumph of displacement. Remember this the next time an innocent remark of yours or a harmless gesture brings forth a surly reply or an avalanche of abuse out of proportion with anything you have said or done. If you are observant, you may be able to find the real source of frustration. In any event, remember that some considerable frustration is there. You may not be the cause. In fact, the cause may lie outside the work situation where you may never be able to discern it. If you remember this phenomenon of displacement, however, you may not be at such a loss in dealing with the situation.

If you fail to recognize displacement, you may somewhat innocently set off a chain reaction through the company. A corporation president sits down to breakfast with the expectation of a pleasant meal as he reads the morning newspaper. His long-suffering wife, however, in exasperation disrupts these pleasant prospects. She tells him, with unmistakable vigor, that she doesn't intend to look at the newspaper over her grapefruit. In a word, the big boss is frustrated, and there isn't a thing he can do about it at the moment. Not with *his* wife!

At the office later it's another story. An error in the first vice-

president's report on his desk catches his eye. The inevitable buzzer is pushed, and in a moment we have a frustrated first vice-president.

Shortly, the second vice-president learns from the first vice-president that he too is not perfect. Then the secretary to the second vice-president finds that her handling of certain correspondence could stand improvement, to say the least. The second vice-president has relieved some of his aggressions, but he's traded them for a frustrated secretary. Following this, the office boy learns from the curt and caustic expressions of the secretary that he has both specific and general failings that want improvement.

The office boy, like the others in this chain of events, knew his place in the scheme of things. You can always pick on someone lower in the scale than you are. It wasn't long before the company cat found out just where she stood, if indeed she stood at all, after the sharp toe of the office boy's shoe came in contact with that feline posterior. The mice in the warehouse had a tough time that day.

Thus it is with displaced aggressions. Seemingly they defy rational understanding. Yet, in reality, if one could discern the structure of the frustration contributing to these belligerent and unfriendly acts, relationships as logical as any found in the proof of a theorem in geometry could be found.

Aggressions may be directed toward the self. This is another proposition that the supervisor might well keep in mind. The individual that experiences the frustration may to a considerable extent feel himself to be the source of his own frustrations. He may feel that it is his fault and his fault alone that he is unable to reach desirable goals. Those individuals who can find no object outside themselves against whom to vent their aggressions may turn those dire, aggressive tendencies toward themselves. Recent investigations of some of the causes of accidents lend plausibility to this theory. Highly frustrated individuals may expose them-

selves to accident situations in the shop which defy other explanations. For this to be true, it is not necessary for the individual deliberately to injure himself, for his accident may be instigated by tendencies toward self-aggression that are not fully conscious. Perhaps this was the real reason John ran through the stop sign.

What happens when we commit an aggressive act? In short, the aggressive act releases the tendencies to commit further aggressive acts. To make this meaning clear, let's imagine that within us is a big steam boiler. Underneath this boiler are hundreds of jets, some of which are burning, but others are idle. Leading out from the top of the boiler are many steam lines, each of which is equipped with a safety valve. Each of the jets represents a source of frustration. When we can't get something we want, one or more of these jets lights up and contributes its heat to the making of steam in the boiler. The more jets that are lit, the more pressure in the boiler and the more strain on the safety valves.

Notice that the jets contribute their heat to the same boiler and that the pressure is built up in only one boiler. So it is in our lives; the tensions produced by each frustration all contribute to the same pool of tension, each one adding its bit. It makes no difference which desires are frustrated; all lead to the common effect within us. Each one lights up its own jet or jets, and each one contributes to the pressure within us. Sickness at home, disappointment on the job, an argument in the union or in the lodge, an unpaid bill, the loss of a jackknife—each makes its contribution; each increases the tendency toward aggression.

To go back to our boiler, as the head of steam builds up, it flows into available lines. Some lines have been closed (inhibited), others partially closed; in still others, the pressure runs high. Eventually, one of the safety valves blows, and the pressure goes down to await the lighting of new fires and the accumulation of more pressure.

Notice that, regardless of which safety valve blew, the pressure in all lines was reduced. Thus the commission of an act of aggression reduces all other tendencies toward aggressive acts. When John let out his pent-up feelings against his brother, he reduced his hostile feelings toward his boss, his girl, and all the other people or objects which he felt contributed to his difficulties.

Pressure may sometimes be relieved by nonaggressive behavior. Fortunately, we can let off steam without popping safety valves. The angry man who takes a vigorous walk instead of starting a disagreeable scene is releasing his tensions in a manner almost as effective as if he had committed an aggression. John, in talking to his brother, after his initial outburst, also was doing an effective job of releasing tension. Some individuals face lifelong frustrations by becoming crusty, sour, and antagonistic. Every contact is an opportunity to release the product of their frustrations. They always have a "chip on the shoulder." They are intensely unhappy people, and they are intensely disliked.

On the other hand, there are those who face equal amounts of frustration who seem to be able to maintain their happiness and balance. Examine the pattern of living of these folks. You will invariably find them busy and interested in things outside themselves. The energy which might normally drain into fruitless, aggressive tendencies is spent in constructive activity.

The Importance of Releasing Pressure and Tension

Those individuals for whom life is probably most difficult are those who never find a way to release the tension stemming from unfulfilled desire. As we pointed out earlier, much of life is simply adjustment to a series of frustrations. This continual building up of tension must find some release. If a person occasionally blows up, he may be the better adjusted because of it. On the other hand, if he is able to find release in some other more acceptable activity, there is no question but that this is preferable. Happy indeed is

the person who finds release from life's pressure by hard work at his job, by his hobby, by some community service, or by any one of thousands of activities in which we can indulge.

Intelligence and position are no guarantees that the individual will find ways of relieving his tensions. Supervisors considerably endowed with both might well list "want of tension release" as an occupational hazard. Particularly difficult is the position of the first-line supervisor, who must represent his men fairly to management and must represent management fairly to his men. He is too often placed on the defensive. To his men he represents company policy. He explains it and defends it. To higher levels of management, this same supervisor feels the necessity of defending the actions of his men. Such an existence can be all pressure and no release. Somewhere that release must be found, or our industrial system has on its hands another psychological casualty.

Wise top management recognizes the unsoundness of this middleman position and definitely invites the first-line supervisor to become an important player on the management team. If the only advantage of this practice were to release the tension under which these supervisors operate, it would be entirely justified.

Talking Helps

We are fortunate that we have tongues with which to communicate to others. Just talking about our troubles gives us more tension release and satisfaction than any other single method. Remember this, Mr. Supervisor, for you have troubles aplenty. Don't hesitate to bend the ear of friend wife. She may not know fully what you're talking about, but that isn't important. The important thing is that you talk your troubles out. If you have a good and understanding friend, to whom you can unburden yourself when the occasion demands, consider yourself lucky. You don't need advice; you just need to talk. You are doubly blessed if this friend is your own supervisor; and indeed the gods

smile upon you if, in addition to being a supervisor and friend, he knows how to listen. You yourself may serve in this position for those under you.

PERSONALITY AND PERSONALITY TYPES

In any discussion of good personnel practices, the question of personality types is almost certain to raise its head. We are advised, in such discussions, to observe how man acts and then to classify him according to one system or another. We are told that people might be classified as extroverts or introverts. Or as pyknics, asthenics, cycloids, or by a host of other awesome names. Sometimes the systems are less formal. Here we might find ways of determining whether or not a man should be classed as a "gold brick," or we may find the familiar "grouch" described, or possibly the "terrible-tempered Mr. Bang." The use of such systems may have some value, but of this we may be certain—it is a very limited one. On the other hand, there is undoubtedly considerable danger in using them.

Treat the Patient, Not the Classification

To illustrate this point, let's consider the doctor's job. A large part of it is diagnosis. He spends many years studying about diseases and their symptoms. To bring out the best in the physician, much of this study is done on actual clinical cases. All this experience is brought to bear on each individual case the doctor sees.

The first thing the physician does is to learn from the patient just exactly what his symptoms are. With this knowledge, the doctor classifies the patient according to his sickness. The prescribed treatment for the patient follows that which is set up for the class of sickness troubling the patient. If the diagnosis is wrong, the treatment will do no good; it may indeed be harmful.

It is obvious here how important it is for the doctor to be a good diagnostician.

The good physician knows, however, that a complete and final diagnosis is more often than not impossible. Accordingly, he adapts his treatment to the individual. He never lets himself forget that he is treating John Jones and not some classical case described in his medical textbook. The good physician treats the patient, not the classification of illness.

Similarly, in the study of personality, trait classifications are but crude tools. They may do much more harm than good in the hands of those not properly trained to use them, or perhaps it would be better to say, in the hands of those not properly trained to disregard them. The great danger with personality traits is that the names and descriptions seem so plausible that we expect people to fit neatly into the niche these classifications provide for them. If they don't fit exactly, as is almost always the case, we see no harm in pushing a little bit here and stretching a little bit there so that we can have one more person filed neatly away. Once we have the person so classified, we can conveniently forget about him. He is no longer an individual but an old and familiar classification. We reach to the shelf and take down our dog-eared textbook and look up what one does when dealing with introverts or cycloids or grouches or what have you. So we no longer take into account the individual at all.

Here is an illustration of the danger of this way of thinking. You catch a man in a falsehood and you classify him as a liar. Suddenly, in your thinking, he becomes some special brand of person that you cannot hope to understand because somehow he functions in a way different from you. You tend to look upon him always as a liar, not as a person whose statement at a specific time and under certain circumstances did not tally with certain verifiable facts to which you had access. To the "honest" man, there is no understanding of the liar. Should this "honest" man,

however, study the facts as they are presented to his experience, he may gain understanding of the reasons behind the lie or, indeed, the reasons behind persistent lying.

In this chapter we have avoided discussions of personality traits and concentrated rather on certain underlying principles of behavior that would aid, not in classifying people, but in understanding the reasons why people behave in the way they do.

In summary, we have said that people have certain wants that must be satisfied. Important among these wants are those which are social in nature; for example, each individual needs respect and love from his fellow man. We have gone on to say that the failure to gain the satisfaction of these wants creates in us frustrations which in turn affect our behavior. We react to frustration in one of the following ways:

1. Solving our problem rationally
2. Resigning ourselves to the situation
3. Detouring around the obstacle which created our frustration
4. Leaving the field
5. Developing aggressive tendencies

In the face of frustration, we may follow any or all of the above reaction patterns.

While this discussion is by no means complete, and much has been left unsaid, we feel that in the substance of this chapter a key to the understanding of much of the behavior we encounter as supervisors has been given. Furthermore, a way of dealing with human problems can be deduced from these principles.

The Futility of Anger

From the foregoing it should be apparent that anger is a weak tool in the supervisor's kit. True, it may relieve pent-up tensions in the supervisor, but at the risk of creating them in the worker. Bawling out, which may indeed be a delicious experience for the

supervisor (we are, of course, assuming that he is doing the bawling out) invariably creates well-nigh intolerable tensions in the object of attack. No matter how complacent the recipient appears under the barrage of words, he is experiencing frustration. In general, it is not the part of the supervisor to create frustration. Rather, it is his function to see that it is minimized. To do this effectively, he anticipates the sources and attempts to eliminate them. On the other hand, after the causes have occurred, as they inevitably will, he does his best to see that they are not aggravated.

The Value of Understanding

It is our hope that this approach, through the analysis of the dynamics of frustration, will encourage in the supervisor a desire to understand the reasons behind the faults and failings of his workers. We hope that it will discourage him from a quick classification of people. We hope it will prevent him from labeling a person according to some formal or informal classification scheme, thereby ending forever his efforts to understand that person. This, of course, is a major aim of the entire book.

Questions for Discussion

1. Give illustrations from your own experience of the three types of frustration producing conflict described in the chapter.
2. Within recent weeks, which of the five methods of meeting conflict and frustration have you used? Which have you observed others using?
3. In view of the discussion in this chapter, can you imagine any truly aggressive behavior which does not stem from frustration?
4. A supervisor becomes angry at an incompetent worker. He bawls him out. In terms of the discussion of frustration in this chapter, balance the good and bad effects of this "bawling out."
5. Do you agree with the dictum: "Never show your anger"? Discuss.
6. What are the dangers in trying to "type" personality?

*

SIX

Selecting the Best Man for the Job

A generation ago, nearly all industrial hiring was done by the supervisor. Link [1] tells a classic story about an old-time "Bull of the Woods," who described his method of hiring in this way: "On Mondays I turns down all men with white collars, on Tuesdays all with blue eyes. Redheaded men I never hires, and there do be days when I have a grouch and hires only every tenth man."

WHO SHOULD SELECT EMPLOYEES?

Today, hiring has been largely taken over by the employment office or the personnel department. Does this mean, then, that the supervisor should take no part in the hiring process? It certainly does not; for since the supervisor is closer to the actual job, he usually knows the work better than any one else. The supervisor still passes final judgment on who shall be hired in many firms. And this is as it should be for several reasons. First, if the supervisor makes the final decision in hiring men for his department, then he is recognized as a man of authority and as an important part of management. When the supervisor has had no part in the

[1] H. C. LINK, "Employment Psychology," p. 14. The Macmillan Company, New York, 1920.

selection process, a worker is likely to assume that his real boss is the person who interviewed him and assigned him to the work. Second, since top management holds the supervisor personally responsible for production in his department, it is only just and fair that the supervisor should have some say in who shall work with him. Supervisors quite naturally take a greater interest in and feel a deeper responsibility for men they have helped to select.

Supervisors Should Aid in Selecting

Uhrbrock, an authority on interviewing, has this to say about the supervisor's part in selection interviews: [2] "In normal times, from five to ten per cent of the applicants in the well-organized employment office will survive the preliminaries and be referred to the foreman or department head who placed a requisition for help."

This expert goes on to say that applicants who survive preliminary selection will have certain previously agreed upon qualifications. From the application blank the supervisor will quickly get certain facts about the man, such as his age, experience, and education. The supervisor will not rehash information already gathered by the employment interviewer but will direct his interview into channels related to specific job aptitude and skills. Success of the dovetailing of these two interviews depends upon mutual understanding between the supervisor and the employment department. Thus, the supervisor's intimate knowledge of the job makes it natural for him to examine the applicant in this area. The supervisor also has the advantage of being able to demonstrate the actual job and the working conditions, including disagreeable ones. No chance here for the worker to complain

[2] Richard S. Uhrbrock, The Personnel Interview, *Personnel Psychology*, Vol. 1, No. 3, pp. 281–282, 1948.

that he didn't know what the job would be like before he accepted.

Personnel Departments Recruit and Screen

The personnel and employment department can provide a very real service to supervisors. Since personnel men are in intimate touch with the labor market, they are in a better position to recruit personnel. They should have special training and the ability to apply scientific methods for screening out the undesirables. Ideally, the personnel department should work very closely with all supervisors. Supervisors should think of personnel men as staff specialists who assist them, just as do members of the training department, time-study department, payroll department, and others. Supervisors can and should provide the personnel department with clear statements of the qualifications needed for success on each job. Their experience should contribute much in setting up the worker specifications for the job. Employment specialists can apply these specifications in their interviewing, testing, and investigating. They screen the applicants and refer those they think are qualified to the supervisor for final interviewing.

Selecting Should Be Cooperative

Small shops and offices have an unusual opportunity to use employee participation in hiring. To illustrate: Ernie Kallenbach, an Eldon, Missouri, farm-equipment dealer, employs nine mechanics and a foreman in his service shop. When a new man is needed, every mechanic in the shop, as well as the foreman and the dealer, individually interviews each prospect. A blackball from any one of them, and the applicant is not employed. The result? Since everyone has participated in selecting the new man, they all feel responsible for him; they help the foreman to train him and generally make him welcome, instead of hazing him or

giving him the works which so often happens in small shops. It has helped to weld them all into a loyal team. Since he has been using this rather novel method, Mr. Kallenbach has never had to fire a man. He reports that one mechanic who was employed by all the boys didn't make the grade. This employee failed to appear at work one day. The dealer made inquiries, thinking the mechanic might be sick, but learned that he had left town. What really had happened was that this time they had picked a lazy fellow; so the boys froze him out themselves. The dealer didn't know quite how, but he didn't have to let him out. This simple democratic hiring method, representing sound human-relations principles which he has learned the hard way, is typical of all Mr. Kallenbach's operations and might well be envied by many a great organization.

Hiring the worker, then, should be a cooperative process, with the employment or personnel department recruiting, screening, and referring applicants and with the supervisor making the final decision and selection. This implies a close cooperative relationship between the supervisor and the personnel department. The basic personnel activities in a company should be administered by the supervisors themselves. The personnel specialists, being staff men, are there to assist and advise the line organization. Since the selection of men is such a vital procedure and is so extremely important to the progress of an organization, supervisors should be quite familiar with the best methods in employment. It is for this reason that we review here in some detail the procedures in the selection of workers.

EMPLOYEE QUALIFICATIONS

Before any recruiting or selection can be done intelligently, the desirable and necessary qualifications of the workers should be set down. In this, the supervisor can be of great help to the per-

The personnel office should recruit and screen applicants and then refer them to the line organization.

But the supervisor should have and use final authority to accept or reject them.

sonnel department. From his experience with many employees on each job, he knows the qualities and abilities which the competent ones have and which those who fail lack. Yet, it isn't enough just to know which traits are needed; it is also necessary to know *how much* of each skill or trait is required for success on the job. The good supervisor should be able to make shrewd estimates of the degree and range of the characteristics which competent workers possess; these should be recorded in the personnel department and incorporated in the job descriptions and specifications.

How these job descriptions and specifications are made is reviewed in Chap. 11. The first step, then, for all parties who are concerned with selection should be to analyze the job specifications and consider the opinions of the supervisor.

Evaluating Qualifications

The personnel department should refine these evaluations. This is done by analyzing the records of all employees, or a large sample of them, who have ever worked on the job. One way is to sort employees' records into two classes: (1) those who have been satisfactory and (2) those who were unsatisfactory or failures. In determining which employees have been satisfactory and which have failed, there are several important factors to consider. For example, (1) the better employees should have higher average production records; (2) they should, for the most part, have stayed longer with the company because it is obviously undesirable to have a high turnover rate; (3) their attendance should be more regular; (4) their employee service ratings should be higher; and (5) more of them should show a history of promotions to more responsible jobs.

Each fact about the employee or each personal history item can be tabulated for both groups (satisfactory and unsatisfactory). For example, assume that we wish to employ a mechanic's

helper. By averaging all the records of the men who have worked as mechanic's helpers and who were rated as satisfactory, we discover that they had the qualifications shown below. The unsatisfactory workers had the qualifications listed in the right-hand column of the chart.

	Satisfactory	*Unsatisfactory*
Age	19 to 29	Under 18 or over 30
Education	1 year high school	More than 3 years high school
Residence	Within 2 miles of plant	Over 2 miles from plant
Typical experience	6 to 8 months as a janitor, laborer, handyman in a garage, public utility, hotel, or factory	None, or clerical, or sales work

If tests have been used, other specifications will be available, so that the desirable range of scores for intelligence, aptitudes, interests, and other personality traits may be added to the list of qualifications. Thus, we obtain a rather definite listing of desirable and necessary characteristics and of how much of each of these to look for when selecting a mechanic's helper.

This is sometimes carried one step farther. Weights or numerical values are given to each of the characteristics, and then a total passing score is set. Applicants who lack any of the vital qualifications or who are rated below the minimum total passing score are rejected. It may also be desirable to set a ceiling or a top maximum score on some traits beyond which applicants will not be hired. This is a recognition of the well-established principle that employees who are over-qualified for any particular job are frequently just as unsatisfactory as those who cannot meet minimum specifications.

SOURCES FOR RECRUITING EMPLOYEES

When a vacancy occurs, how should we find the right man to fill it? The answer to this question rests squarely on company policy. If the company's policy is really to "promote from within" and "upgrade," then without exception a search for a qualified worker should first be made among the present employees.

Promotion from Within

Few actions are more discouraging to workers and harmful to plant morale than to have a job filled by an outsider when the job might represent a promotion to a present qualified employee. Most companies believe that they follow the promotion-from-within procedure. When we study the figures, we often find that the policy is only a pious statement or a hollow phrase. Failure to locate qualified men for upgrading is usually due to poor clearance between departments or to the fact that the personnel department is not kept sufficiently informed. We know that when men who believe they are qualified for promotion or transfer are passed over, grievances frequently result. Certainly, the training and experience obtained within the company should be one of the best preparations for other related jobs. The company's job specifications should show the interrelationships of jobs and the ladders of promotion. If the supervisors know their men as they should, they will be in a position to recommend suitable workers for transfer and promotion.

"Sure, I know Stan's good. That's why I don't want to promote him. If I let him go, our production would drop. And to get another good guy on the ball would take too much of my time." Here is a most shortsighted policy. If it is followed, the company can scarcely hope to make progress. The development and improvement of personnel within the company is the prime mover of

its progress. Supervisors who don't want to release their men should ask themselves this question: "Where would I be today if my previous bosses had had this attitude?"

A sound plan for clearing information about vacancies and about locating personnel in the plant or office to fill them is a must in any good human-relations program. It is equally wise to have an understudy for each supervisory job, so that promotions can be made without delay or without upsetting the organization.

Employees' Recommendations

"I always ask the boys in the shop to bring in a good man," said an experienced supervisor. "They know the skilled men in other plants and the ones I couldn't ask. And I've hired only one lemon that way so far. He was someone's brother-in-law."

Recommendations of present employees can be a fertile source of qualified personnel. There are sound reasons for this. Employees on the job know the functions and duties of the work. They usually know other people who, like themselves, have the right experience and abilities. Often they have worked with them elsewhere. They are not likely to recommend applicants who would fall down on the job or who are untrustworthy, because that would reflect on them. Again, they know that if they bring in new employees who are not capable, they may have to do much of their work. An employee who has helped a friend get a job is more interested in helping him to learn the work. This makes for congeniality and good morale, for teamwork. For these reasons many progressive companies inform their employees of all vacancies and asked them to make recommendations.

Other Sources

But if no qualified worker is available for promotion or transfer within the plant, and the employees have none to recommend, what then? What are the best ways to find good employees? The

answer to that question depends largely on economic conditions and on the labor market in the community. It's a common practice to rely on applicants who apply "at the gate." Advertising is another common method. No one can deny that sometimes good employees are found in these ways. But before looking elsewhere, it might be well to see if any ex-employees are available. Those who left under favorable circumstances may wish to return. Think of the time and effort saved in breaking in a new worker if a good former one can be found.

Other community sources of employees should not be overlooked. Schools, employment offices, both public and private, veterans' organizations, unions, and other industrial firms often can recommend excellent applicants.

INTERVIEWING

Every time a supervisor talks to an employee, to a group, to the works manager, or, indeed, to any other people, he is interviewing, whether he realizes it or not. Interviewing is probably the most widely used method for getting ideas across to others or for obtaining information from them. In almost every situation in which there is conversation, we are interviewing. This includes inducting a new worker in his job, explaining company policy or procedures, explaining directions and orders, talking with workers' committees and other members of management, conferring on complaints and grievances, and a host of other day-by-day office or shop actions. Because this tool is so widely used, especially in hiring, the supervisor should know its values and limitations. Knowing the dangers and pitfalls that are ever present, as well as the main advantages obtained from good interviewing, the supervisor can greatly improve his own methods.

The interview is one of the principal devices used by the employment department in hiring new workers. The supervisor

hould be able to assist the employment department by obtaining ıformation through interviews on subjects in which he is most xperienced. Also, for the satisfaction of the supervisor, he should e able to conduct a skillful interview in order to satisfy himself ıat the man hired for his department meets his standards and equirements.

s Interviewing Scientific?

Interviewing is an art rather than a scientific technique. This nplies that no two people conduct an interview in quite the ıme manner. Since interviewing is not a scientific method, it is sually not a very exact procedure. Be that as it may, interviewing widely practiced and is used in all phases and levels of mangement. Even though it isn't always the best form of appraising, valuating, or measuring, there is no substitute for it for many ccasions. Only by seeing and talking with a person can we be ıtisfied that we like him or that he will meet our special reuirements. Therein lies one of the principal weaknesses of the ıterview. For, unless we are very careful, we will see and hear ı an interview only that which we are looking for. In other words, e interpret the other person's words and actions only in terms f our own *opinions* and *prejudices*. If our opinions are sound, nd if we are able to judge from the conversation how well the ther person in the interview meets our standards, then the interiew can be a valuable tool. But how rarely does even the most cilled interviewer dismiss his own personal bias and evaluate ıe other fellow without prejudice!

Rice [3] analyzed the conclusions made by trained interviewers ho all used the same questions in interviewing 2,000 vagrants) determine the cause of their downfall. One of the interviewers, socialist, reported that 39 per cent were down and out because

[3] S. A. Rice, Contagious Bias in the Interview, *American Journal of Sociology*, Vol. 35, pp. 420–423, 1929.

of bad working conditions and 22 per cent because of alcohol. Another interviewer, who was an ardent prohibitionist, believed that only 7 per cent fell by the wayside because of industrial conditions and 62 per cent because of the demon rum. Obviously the beliefs of both interviewers influenced their interviews, and they interpreted them in terms of their own prejudices and experience.

Can experienced interviewers agree among themselves on the results of their interviews? This raises a serious question on the validity or trustworthiness of all interviewing. The facts established through research are a bit discouraging. They show that there is much disagreement among even the so-called experts. For example, Uhrbrock [4] shows how seven of them vary in their ratings after interviewing eleven applicants. Each interviewer rated each applicant, ranking the men in the order in which he considered them suitable, from first to eleventh. All eleven men were interviewed individually, during one day at manufacturing headquarters, by a vice-president, a general superintendent, three division superintendents, a factory superintendent, and the director of industrial relations. When the seven ratings were tallied, "Mc" was ranked 6, 1, 2, 2, 4, 10, and 1; "Dy" was rated 2, 4, 6. 5, 11, 3, and 3—not much uniformity of opinion among the seven judges of those men. It was the same story for the others; there was little agreement even among the experts on appraisals made through interviewing. We must conclude that interviewing is not scientific. It can be, however, an effective method when it is carefully planned.

How to Interview

The word "interview" means an exchange of views between two or more persons. It isn't a one-way street where one individual asks all the questions and the other replies. A real inter-

[4] *Op. cit.*, p. 288.

view, regardless of the situation, should provide an opportunity for all parties to exchange their ideas freely and to exhibit their attitudes on whatever subjects are discussed. All too often, the supervisor or employment manager forgets the two-sidedness of an interview and completely controls and directs the course of the conversation. Firing direct questions at the other fellow gives him little chance to express himself other than by "yes," or "no" answers. This cross-examination method, much like the method which the district attorney uses in cross-examining a witness on the stand, robs the interview of much of its usefulness. While it may shorten the process, it is doubtful whether accurate information is often so obtained. While the interviewer may get direct answers to his questions by this method, he rarely obtains the valuable additional information and ideas which add so much to the interpretation and understanding of the answers.

Another method frequently used is called "conversational," or "nondirected," interviewing. Actually it is the same procedure that we discuss at length in Chap. 13 when we consider nondirective counseling. This method allows the interviewee to talk freely and express himself, to volunteer other thoughts, even at the expense of rambling at times. It usually supplies valuable information which may greatly affect the way one interprets the answers. Furthermore, this freer, conversational interview invites the interviewee to display his attitudes, how he feels, what his opinions and prejudices may be, which always surround the topic being discussed. Such *tip-offs* about a person's attitudes are about the most informative result of interviewing. When properly done, the interview is still the best known method for uncovering and displaying attitudes.

Skillful interviewers usually use a combination of the two methods here described. Occasionally they cross-examine, especially when they are questioning to follow up and verify some doubtful point. But they also employ the conversational method

when searching for attitudes, expressions of habits, and personality traits.

Purposes of Interviews

The supervisor-interviewer should have definite points in mind on which he expects to obtain information during the interview, but he should permit the worker to express himself in his own way! Through words and actions, clues to personality may be observed and noted by the trained interviewer. Supervisors' interviews usually have several general purposes, such as:

1. To secure information
2. To give information
3. To change behavior, to train or motivate
4. To establish a friendly relationship.

Under the first, *to secure information,* come all the items needed for the record to supplement the application blank about the employee's work history, his personality and character, his home and educational background, his health and appearance, past achievements, aims and ambitions, attitudes, etc. *To give information* may entail personal or vocational counsel, or the explanation of policies, procedures, and conditions of work in the company. *To change behavior, to train or motivate* includes most of the day-to-day duties of supervisors. The fourth purpose, *to establish a friendly relationship,* is just practicing good employer relations. How important this fourth purpose is considered by the General Electric Company is illustrated by the framed policy statement which is on the desk of receptionists and interviewers in the company. Over the signature of Owen D. Young, it says, "Let us not forget that anybody who will visit us, anybody who will call us over the telephone, anybody who will seek out aid, offers to us the privilege of creating good will for the General Electric Company. Let us not throw away that privilege."

Qualities of a Good Interviewer

A complete description of a perfect interviewer would probably be mistaken for a character reference of a saint. There is no such animal as the *perfect interviewer*. One reason for this lies in the fact that the interviewer is called upon to meet and adjust himself to almost every kind of personality and to a wide variety of problems in the course of his work. Therefore, he should be able to understand the whole scale of human emotions and behavior much as the master organist knows his keyboards. No attempt is made here to list all the qualifications of a good interviewer, but here are some of his desirable characteristics. Check yourself against them.

A successful interviewer should

- Inspire confidence in all kinds of people
- Be a good listener and observer
- Be adaptable, not a slave to any system
- Be free from personal prejudice
- Be a good analyst and critic
- Be able to put people at ease
- Be kindly, sympathetic, firm, tactful, and a competent counselor
- Have a sense of humor, use imagination
- Not be impulsive, use no snap judgments
- Have a good memory for names, faces, and facts
- Recognize and use scientific methods, know job specifications and conditions of work of the plant, know management, their policies, etc.
- Be able to talk the language of the person being interviewed
- Keep adequate records, criticize own method after each interview

Common Errors in Interviewing

Let us consider some of the more serious dangers and pitfalls into which even the experienced interviewer may fall. Almost everyone slips occasionally into some of them. It follows, then, that we must be aware of them, to guard against ruining the whole value of our interviews.

Judging from Appearance

To judge from appearance is one of the most common mistakes due to personal prejudice and impulsive judgment. Unconsciously, almost everyone associates new acquaintances with others whom they have known. Something in the appearance, manner, dress, or expression of the person just introduced reminds one of another individual who has some similar characteristics. A very common error made under these circumstances is to assume that the new acquaintance will have all or many of the characteristics or traits which the other person has. Scientific facts known about personality tend to disprove that there is any real relation between appearance and character. That is to say, except for those characteristics which are the direct result of some behavior activity of the individual, there is probably no relationship between the personalities and physical features of people. The supervisor-interviewer must be on constant guard against such prejudices and associations. Because a person looks like another person does not mean that he will behave like him or will have a similar personality.

Generalizing

Another equally dangerous error might be called the generalizing habit. It is very tempting to conclude that a person who is well-groomed will be a neat workman or that an individual who is slow in his speech will also work at a slow pace. The untidy appearance and dirty fingernails of a worker may be due to no

other cause than that he stayed overtime in the shop to do a more careful and thorough job. Errors in generalizing are based on the belief that a person's habits are transferred from one situation to others. Reputable scientists once thought that habits would *carry over* and that if they existed in one phase of the personality, they would automatically transfer to the others. (See Chap. 8 on Training.) It now seems to be well-established that this idea is wrong. Habits are known to be *specific*; that is, individuals have separate, distinct habit patterns for each situation. A person may have acceptable habits in one situation and not in others. It is unsafe to assume that because a man has been honest in money matters he will also be honest in reporting a grievance to his steward. Be careful not to draw general conclusions from one or a few observations.

Unconscious Imitation

All human beings tend in varying degrees to imitate the moods and manners of those with whom they talk. Some individuals are very sensitive indeed, and quickly respond by imitating those with whom they are talking. An interesting way to demonstrate this tendency is to show a picture of a smiling person to a group of people. The reaction is a smile. If a picture of a sour-visaged individual is shown, the group reacts accordingly. The tendency to imitate and *follow the lead* may have either good or bad results in interviewing. The interviewer must be on guard constantly, to avoid catching a pessimistic or other undesirable mood from the applicant. He should also, through his own moods and manner, transfer to the person he is interviewing moods which will promote a friendly, business-like atmosphere.

Discredited Systems

Character analyses, physiognomy, astrology, palmistry, graphology, numerology, and all the other fake sciences have no place

in interviewing. The theories and so-called "facts" of all these imposters have all been disproved by reputable scientists. The use of photographs to judge abilities has long been discredited. Remember, there is no push-button system for reading character or personality. We may be able to formulate good appraisals by studying behavior and by understanding the motives causing it. No other method has ever worked successfully.

Taking Statements at Face Value

Still another danger of interviewing lies in believing everything one hears. It seems easier and kinder to accept at face value all statements made by the worker. Applicants have *something to sell.* Many of them will therefore exaggerate their abilities. When in doubt about a statement, the interviewer may best use the cross-examination method. When the applicant claims experience, the interviewer who knows the duties of the job should have little difficulty in determining whether his statements are true. Follow-up questions usually verify or disprove statements made in the interview or on the application blank. Interviewers find the "Dictionary of Occupational Titles," published by the U. S. Department of Labor, very helpful in giving them information about jobs with which they aren't too familiar. A quick reference to this dictionary will provide the interviewer with enough essential information to ask intelligent questions and to determine whether the man knows at least the duties of the job in which he claims experience.

To illustrate how common this practice of overstatement is, one need only cite the experience [5] of the American Army with drafted men. Of the millions of men who were interviewed to determine

[5] See Jesse L. Hopkins, "Emergence of a New Public Employment Service," p. 136, New York Employment Service, 1935.

their skills for placement in the Army, only six per cent of those who claimed an occupational skill later proved actually to possess it. One man who claimed "extensive experience on bridge construction" was placed in the engineering corps. It developed that his experience had been in a dentist's laboratory making bridges for teeth.

Conducting the Interview

The first step in any interview is to overcome the nervousness of the applicant or employee. He must be made to feel at ease. This is called "establishing *rapport*." How this is accomplished depends upon the two personalities concerned. Sometimes it can be done by a trite remark about the weather and a friendly smile; again, it may be accomplished by asking friendly questions about the worker and his family. Sometimes mentioning a friend who lives in his neighborhood breaks the ice. If he wears a service button, some question or comment about his military service may relax him. There is no one way, but whatever is said must reflect interest and friendliness. Employees are very quick to sense attitudes which are not genuine. Phoney pleasantries cannot be substituted for sincerity.

Now that he's comfortably seated and at ease, how to proceed? That naturally depends on the situation and on your goal. If you're looking him over for employment, you need to learn many things about him, and you need to tell him the good as well as the bad features of the job. If you follow the same stiff method every time, your interviews will be wooden. It's better to have certain points to cover planned and to have several important questions ready. Then try to let the interview flow along evenly and develop naturally. A standardized interview always seems artificial and formal. Remember, a good interview is a two-way conversation. Let the other fellow talk at least half the time.

How to Phrase Your Questions

If your questions call only for a direct answer, such as "yes" or "no," or a date or name, conversation is apt to come to an abrupt end. So, instead of asking questions like "What job do you want?" or "Are you working now?", it might keep things rolling and be more informative to say, "Tell me what your duties were on your last job," or "Why do you think you'd like to work here?". Some more questions of the type which stimulate fuller replies and thus *reveal attitudes* are

Why do you want to change jobs now?
What is your idea of a good job?
How did they treat you where you worked last?
What criticisms were made of your work?
What mistakes did you make on your last job?
What promotions have you had?
How did your production compare with that of other workers?
What features of your work did you enjoy most? Least?
What do you want to make of yourself? What is your ambition?

Be sure to use simple words that are understood. Applicants don't like to show their ignorance and often won't admit that they don't understand. If an applicant seems confused by words you use, repeat your question, using simpler terms, and let him save face.

"What is your name?" "Where do you live?" "How old are you?" Such are the questions sometimes used by interviewers, even when they are looking at the application blank which records this information. They probably do this to cover their embarrassment or because they haven't planned the interview. Then there are the interviewers who slavishly follow the items on the application blank, asking unnecessary questions about things already recorded there. Saving time in interviews is one of the purposes

of the application blank. It may give good leads for additional information, but nothing is gained by asking a man his age or his last place of employment when these facts are recorded. Moore makes the following excellent suggestions.[6]

a. Questions already answered in the application blank should not be repeated unless the applicant is told why his answer is inadequate.
b. No direct questions should be used until rapport is established and the interviewee is ready to give the desired information accurately.
c. Questions relating to one phase of the applicant's life and interests should be arranged in succession, and given in simple, straightforward manner, without any attempt at shrewdness, cleverness, or trickery.
d. The interviewer should avoid the attitude of the authoritative, impertinent cross-examiner, who always puts the applicant on the defensive and prevents any natural expression of hopes or interests.

Give Information, Too

Don't forget that you should also give information. The applicant probably has only a hazy idea about the conditions of work or perhaps even about the duties of the job. Describe them, and don't duck the bad features. It's better to face them before he decides to take the job. Show him around the shop too; this saves disappointment and misunderstandings later. If he can't take it, it's better for him and for the company if he passes up the job. Explain rules of seniority, safety, pay, and unions before the decision is made. And don't underplay the work or overplay it either. However, it's better for him to be agreeably surprised with some of the good features, after starting, than for him to expect too

[6] Herbert Moore, "Psychology for Business and Industry," 2d ed., p. 93, McGraw-Hill Book Company, Inc., New York, 1942.

much. Above all, when you interview, try to put yourself in the other fellow's place.

Closing the Interview

The length of the interview must depend on the situation. Even your posture can affect its length. If you sit erect and assume a business-like posture, you'll find that the interview will probably take about one-third less time, although covering the same topics, as when you slouch or put your feet on the desk.

How the interview is closed depends, again, on the the personalities involved and on the ground covered. All interviews should lead to something—some next step or perhaps a rejection of the applicant. If you don't want to hire a man, don't embarrass him. Explain tactfully that he is not suited for this particular work or that you wish to see others before deciding. Let him save face, and remember to close by trying to make a friend for the company.

At the end of a good interview, an experienced interviewer should be able to write a short summary of his impressions of the person interviewed. It cannot, however, be said too strongly that the interviewer should use not only a pinch of salt but perhaps the entire bag in interpreting his judgments on the individual's personality. About all that the most skillful observer can get from an interview are opinions on the applicant's suitability. No interview can reveal a person's dependability, his honesty, industriousness, manual skill, aptitude, or how well he will stand up under the pressures of the job. The human being is much too complex to be judged conclusively during one interview. And one last suggestion: Don't kid yourself into believing that you're a good judge of men. Such snap judgments from short interviews only display prejudice and bias of the interviewer. There has never existed an infallible judge of character and personality through just the interviewing route.

THE USE OF TESTS

"Anything which exists can be measured." This is the foundation of all sciences. By this the scientist means that with proper research and understanding some method can eventually be found to determine how much there is of anything in existence—its degree, size, or strength. This holds also for human traits and abilities. Most human traits are not simple, so it isn't easy to find accurate measurements for them. But, through research, valid yardsticks called "tests" are being developed, which throw light on the nature of the traits and on how we can measure them in selecting the right man for each job.

Abilities and Traits Required for the Job

Every job makes certain requirements of the worker. Some jobs make great demands on the mental abilities; others require physical capacities, such as strength, coordination, and use of the senses. In still other jobs, personality characteristics of temperament and emotion are more important. Most jobs make demands from all of these areas of human abilities. This means that no person can perform any job successfully by using just his mental abilities, or only his emotional and physical traits. A combination of several of them is used in even the simplest tasks. The amount or degree of human abilities needed to do the job varies considerably from job to job. For example, a good mechanic needs a variety of specific abilities in a fairly definite pattern. Among these are several kinds of muscular coordination, accurate vision and hearing, a fair amount of strength and endurance; he needs at least an average amount of intelligence as well as mechanical aptitude. He must be able to visualize the structure of things—to work from two dimensions, as from a blueprint, to three-dimensional space in structures. Also, he must have good powers

The values of pre-employment physical examinations are well established.

of observation and an interest in machines. He needs emotional balance to get along with fellow workers; he needs enough knowledge about the materials and enough skill with tools and machines to manipulate them, to accomplish his purpose and to avoid accidents. These are just a few of the traits needed by a mechanic. A stenographer needs a high degree of clerical aptitude, as well as finger dexterity, emotional balance, interest in office work, a neat and pleasing appearance, good health, hearing, and vision.

It is also important to know *how much* of each of these traits one needs to be successful. Proper tests can measure how much the worker has or needs. As mentioned previously, hiring a worker with too much ability for a job is often as bad as hiring one with too little. The over-qualified employee is not challenged by his work. He may become bored and have accidents. Some-

times he wastes time, annoys others, becomes a troublemaker. Usually he quits when he finds a more challenging job. On the other hand, the man with insufficient ability cannot learn the job thoroughly, no matter how hard he tries or how much training he is given.

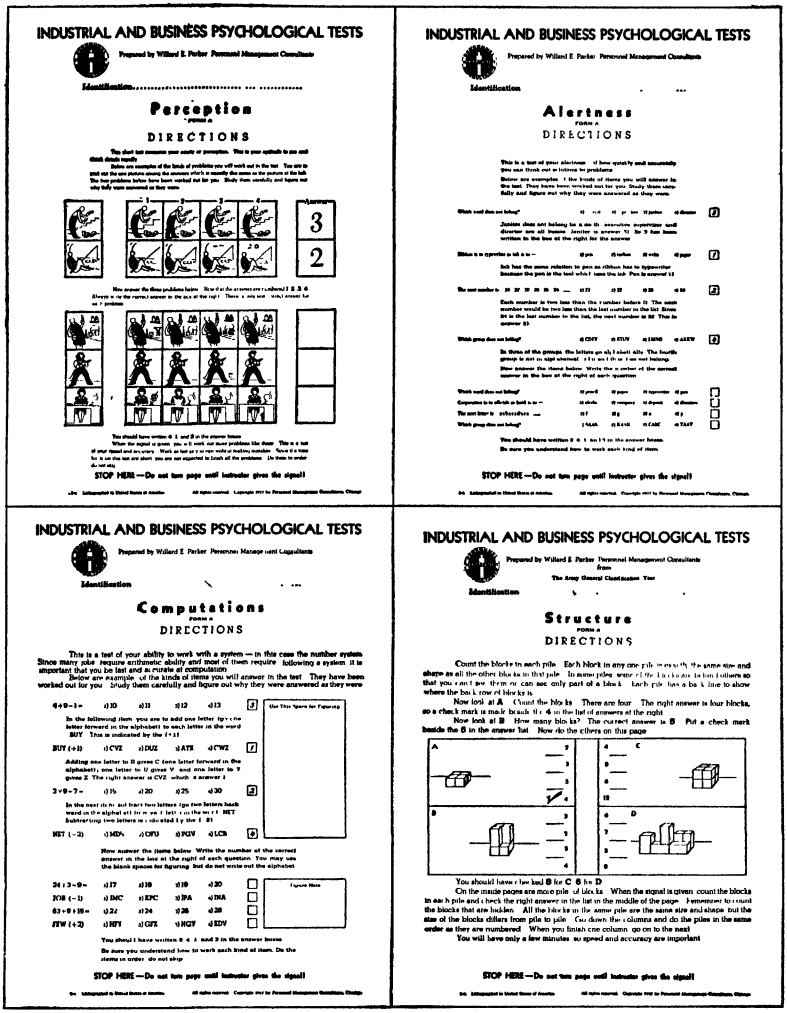
Kinds of Human Abilities

Psychologists often divide the traits of man into four areas: (1) intellectual, (2) muscular or motor, (3) traits of emotion, temperament, and interest, and (4) the physical and sensory capacities. Each group of traits makes its contribution to success at work, but the amount required from each differs markedly from job to job. For example, clerical work, administrative tasks, and jobs requiring judgment, planning, and resourcefulness depend largely on intellectual abilities. In work which is concerned largely in dealing with other people, such as supervision, instruction, or sales, the temperamental and emotional characteristics may be most important. But nearly all such positions also require planning ability and specific knowledge or skill, so the mental abilities are needed too. In manual jobs where the work requires physical strength, rhythm of movements, or speed and accuracy of muscular control, the motor, physical, and sensory capacities are more essential. But, since knowledge of the trade is required in manual jobs, some intellectual abilities are also necessary. Thus, most jobs use at least several traits from all four areas.

What Are Tests?

A psychological test, according to Ruch,[7] "is a carefully planned situation in which the individual's characteristics can be described by a numerical value or score. For example, in a test of reasoning ability the person is given certain problems to solve. His per-

[7] Floyd L. Ruch, "Psychology and Life," 3d ed., p. 546, Scott, Foresman & Company, Chicago, 1948.



Aptitude tests when properly constructed for the jobs in a company are excellent tools for better selection and placement. (Reprinted by permission of Publisher—Personnel Management Consultants, Chicago.)

formance is scored according to the time required to solve the problems or according to the number of problems solved in a given length of time."

Psychological tests do not attempt to measure all aspects of a trait. That would be too complicated and time consuming. Instead, a test measures samples of the trait. Because all human abilities are distributed in the population according to the normal curve, we are able to determine by test scores where any individual ranks with the rest of the population. In other words, we can compare what he can do with what other men can do, and know whether he ranks high, average, or low in an ability or trait. By measuring many employees who are successful on any job with the right tests, it is usually possible to determine which traits, and how much of each, are needed in order to do the work well. By testing also those who have failed on the job, we may learn what they lacked. A valid test must pretty thoroughly separate the successful workers from the failures; its scores must correlate with production or some other criterion of good performance. So it becomes possible to set numerical or quantitative standards for selecting employees. Tests for the selection and placement of employees are now widely accepted and used; but we shouldn't depend on them exclusively. They represent only another technique to be used along with interviewing, investigation, and other methods of selection.

Kinds of Tests

Psychological tests may be classified in a number of ways: (1) group or individual tests; (2) verbal or nonverbal; (3) written or performance; (4) time or power; (5) by the traits which they measure, such as general ability, achievement, interest, personality, motor coordination, dexterity, physical powers, etc.; (6) aptitude or achievement tests.

Aptitude tests measure the *potential* ability of a person to learn

to do some type of work even before he has had any training or experience in it. Some aptitude tests measure general aptitude for the whole field, such as mechanical ability or clerical ability, while others measure specific aptitude for a particular job, such as file clerk, drill press operator, or typesetter.

Achievement tests measure the amount of knowledge or skill that a person already has acquired to perform the job. Most school tests are achievement tests, as are trade tests which measure how much a man knows about his work or machine. They are tests which check his skill in performance. Their principal value lies in checking how proficient a person who claims he has a skill really is. Of course, the kind and amount of training, knowledge, and experience one has acquired have great bearing on the score one makes on achievement tests.

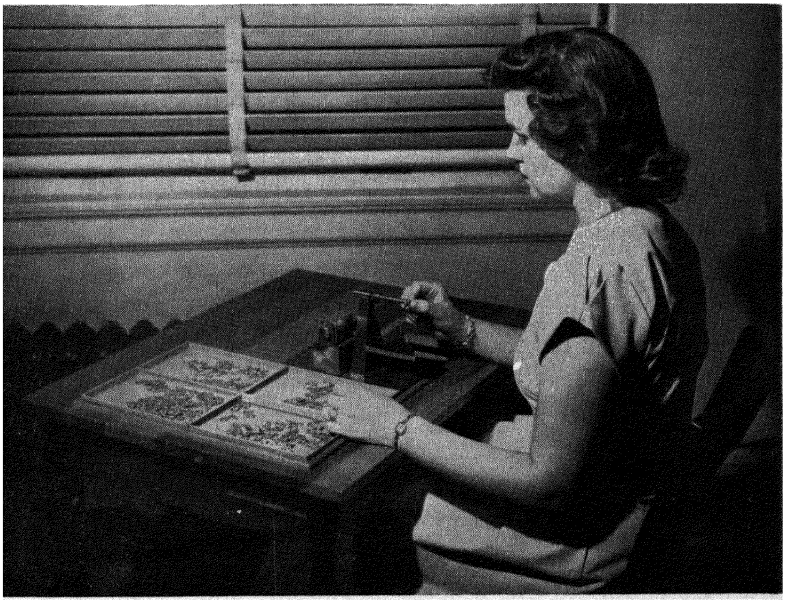
When Should Tests Be Used?

There has been a great deal of mystery and misunderstanding about the use of psychological tests. Psychologists have been testing physical traits for nearly 100 years, and accurate intelligence tests have been available since 1910. Testing in industry started after the First World War. At that time, many firms, observing the successful use of intelligence and aptitude tests in the Army, installed testing programs and expected great things from them. Many employers were disappointed—and no wonder! Some expected tests to solve all their selection problems. This, of course, is too much to expect of any one technique. Testing, at best, can only supplement the other activities of the selection program. Other firms purchased a few tests by labels, and they thought that these tests should measure all the many kinds of work in their organization. This makes about as much sense as trying to measure length with a thermometer or weight with a watch. There are thousands of different tests on the market, each with its separate label and use. Most of these labels are descriptive only in a general

way. Some of the tests are not soundly constructed in the first place. Others are designed to measure some specific capacity under certain definite conditions; they shouldn't be used elsewhere.

Requirements of a Good Test

The general standards or norms furnished with most tests rarely apply to a specific job situation. Basic research on the jobs in the company is necessary in order to know whether any particular test applies at all and to determine what the measurements mean. A test is a scientifically constructed device which must meet certain definite requirements, or it cannot properly be called a test. Two



Some companies devise their own tests. But it takes time, money, and skill. This burring test took National Cash Register several years to develop. It is a good example of a performance test. (*Modern Industry*, Vol. 18, No. 1, p. 50, July 15, 1949.)

absolute essentials must be met: (1) The test must be reliable. This means that a person or a group taking it over again would receive essentially the same scores on it each time it is taken. In other words, it must be a consistent measurement. (2) It must be valid; that is, it must actually measure the trait it is supposed to measure. This means that there must be some way of checking it. For example, a valid test must separate the good employees from those who are poor performers. Production records or merit ratings often serve to check the validity of a test.

How a Test Is Built

For most business and industrial use, tests must be custom-built or adapted to measure the special traits needed on the particular jobs. Constructing a test is a highly technical procedure, requiring a trained psychologist. For building a test, the psychologist makes many careful observations of the job. With supervisors and workers he discusses the skills and abilities which they feel are needed. He tries to determine what abilities and skills the successful workers have which the unsuccessful ones lack. He knows that there are probably many traits involved, so he may try to construct tests which measure combinations of them. He then makes up a long series of items or problems which he thinks may have some bearing on the traits and skills involved. His next step is to try these on the successful and unsuccessful workers. He determines which items tend to be missed by the poor employees and at the same time are successfully answered by the good workers. In other words, certain of his items distinguish between the good and poor employees. From the several hundred questions he started with, he may have only a few left which meet his standards. He continues this process of building and trying out items until he has consistent tests sufficiently long, on which the satisfactory employees nearly always score better than the unsatisfactory ones and which give the same results each time they are

given to them. He knows then that he has a valid and reliable measure for some of the essential traits of that particular job. It matters not at all what label he attaches to the tests. What is important is that he has a tailor-made measuring stick for the specific abilities on a particular job. It is then possible for the employment office to use this yardstick on applicants, and thereby to judge in advance whether they are good bets for employment. In the selection process, applicants are usually tested before they are interviewed to see if they qualify. Only those who meet the standards are interviewed. Those who are not qualified are politely rejected, thus saving much interviewing time.

Intelligence Tests

Intelligence is difficult to define. While it involves the ability to learn, it is more than that. Some definitions describe it as the speed and adequacy of the individual's adjustment to his environment or to novel situations. Even this statement is not wholly correct. Some very adequate adjustments are made instinctively. Certainly the physiological balance which keeps our body in good working order could fit this definition; yet we would not think of these physiological acts as intelligent.

Other definitions emphasize that the ability to make and use abstractions is what is meant by intelligence. Porteus [8] emphasizes capacity for planning as the concomitant feature of intelligence. He states that the "feeble-minded are mentally and socially inadequate because they lack foresight to anticipate a situation, mental alertness to recognize its significance, and common prudence to deal with it." These same qualities also presumably would differentiate the highly intelligent from the average.

While the basic core of intelligence is inherited, the influence of environment and of training can produce profound changes in it.

[8] Stanley D. Porteus, "The Porteus Maze Test and Intelligence," pp. 1–11, Pacific Books, Palo Alto, Calif., 1950.

Inheritance sets the broad limits, while training determines the quality and quantity of intelligence within those limits. Thus, ideal training from infancy on would develop maximum intelligence within the individual, but never could he exceed inherited boundaries. Children underprivileged in terms of their learning experience and environmental conditions reflect their deprivation in lowered intelligence.

Both heredity and environment contribute to intelligence level. To some extent, environmental factors such as training can compensate for lack of native endowment. In Fig. 1 each cylinder

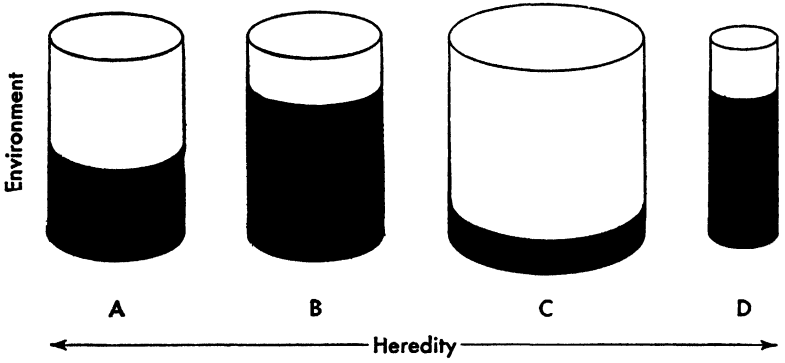


FIG. 1. Both heredity and environment contribute to all differences between individuals, including differences in intelligence. (After R. S. WOODWORTH, "Psychology," 3d ed., p. 140, Henry Holt and Company, Inc., New York, 1937.)

represents a different individual. The diameter of the base represents the contribution made to intelligence by heredity. Environmental contributions are represented by the vertical heights to which each cylinder is filled. Intelligence, then, is represented by the amount of liquid in each vessel. Thus, individuals *A* and *B* have equivalent heredity; but, since *B* has had richer environmental opportunity, his intelligence (volume of liquid) is greater.

C represents a person of great hereditary potential who has had little opportunity to exploit it. In spite of this, his intelligence, represented by the volume of liquid in cylinder *C*, is roughly equal to *D*, whose rich environmental experiences are limited by relatively small native capacity. Appropriate training could work marvelous changes in *C* but only limited improvement in *D*.

Tests give us reasonably accurate estimates of intelligence. Furthermore, repeated tests on the same individual give us surprisingly consistent results even when administered after the passing of many years. Indications are that relative intelligence level changes but little in the life span of the individual.

Intelligence Test Scores

The measurement of amount of each capacity is indicated by some sort of score. Despite differences in computation, all types of scores tell us simply how an individual stands with reference to some group. Centile scores tell us what percentage of a group has been exceeded by a particular score. Thus, on a 75-item test, John may get 45 items correct. Tables constructed for this particular test show that his performance earns a centile (or percentile) score of 76. This means that John has done as well or better than 76 per cent of the group with which he is being compared.

The comparison group may be a representative sample of the workers on a particular job or of the whole population of the nation or region. In intelligence tests, comparisons are generally made with a sample of all the people of the nation. Aptitude tests, tailor-made for a particular plant or job, use scores made by workers in that plant or holding particular jobs.

Intelligence quotients (I.Q.) are based on national norms. Although often used with adults, their widest and most precise use is with children. I.Q.'s indicate rate of development. In their calculation, age differences are taken into account, so that the resulting figures show intellectual potential rather than absolute amount

of ability. Interpretation of specific I.Q.'s is dependent upon the test used. An I.Q. of 100, however, is always interpreted as average. Those of 120 are very superior, and those below 80 indicate considerable intellectual deficiency. Test scores should always be interpreted in terms of other observations of the persons. Such interpretations should be left to the well-trained psychologist.

How Much Intelligence for the Job?

Since mental abilities are required on most jobs, it follows that successful workers in those jobs must have the right amount or degree of intelligence. Mastering the tasks of many jobs depends on whether the worker has enough intelligence. Persons whose intelligence is too low probably will never be competent, no matter how hard they try or how much training they receive. But, for some jobs, having too much intelligence may be a source of a poor adjustment. Many jobs, then, have a lower and upper limit

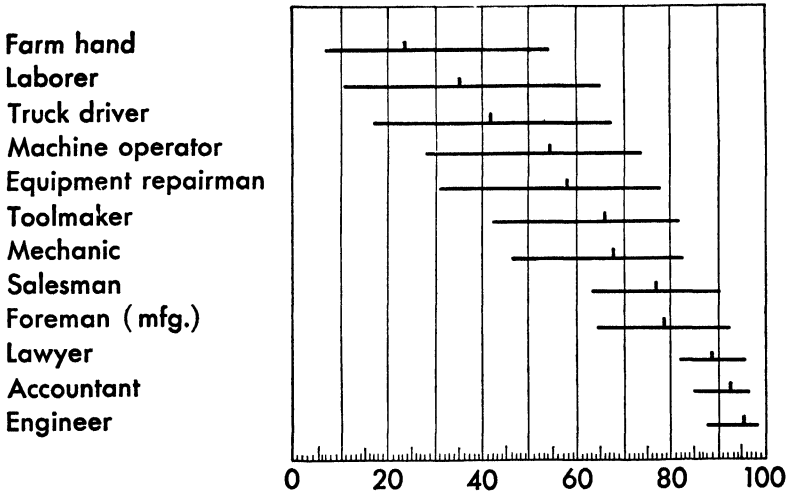


Fig. 2. Range of intelligence in occupations. (Adapted from U. S. Army test results.)

for intelligence—a floor and a ceiling. Workers who are hired below or beyond these limits usually are misfits.

Considerable research has been done to determine the proper range of intelligence for different kinds of work. In Fig. 2, the range of intelligence for the middle half of the workers in a number of occupations is shown. These ranges were derived from the results of the Army General Classification Test. The mark on each line indicates the average score made by the entire group. Notice that the average score for farm hands is 23, while the average score made by engineers is 96. It is well to note that there is considerable overlap between these various occupations. Thus, the smartest laborers perform as well on the test as some foremen.

The average intelligence on each occupation increases as we go down the list of occupations. This shows the definite relationship between intelligence required on each job and the over-all abilities and aptitudes needed for success in it. Of course, intelligence is only one factor in job success. In certain manual jobs where strength and physical endurance are the main qualities needed, intelligence plays only a minor role. It may be better for the worker to have low intelligence in order to be adjusted and happy in such work. This is often true for monotonous tasks and simple assembly line jobs. But the other areas of human personality must also be considered in selecting the worker. Among these we should consider aptitudes, achievement, interests, and emotional factors.

Achievement Tests

Probably the most accurate measurement of how well a man can perform a job is to put him on the job and try him out. This would be an achievement test of his proficiency. But in most instances this would require a temporary appointment and would be expensive, perhaps even dangerous, since the worker of unknown ability might spoil materials, break machines, or injure

himself. So other kinds of achievement tests have been designed which test his ability by determining how much an applicant knows about the work, or how good is his performance on equipment which is similar to that used on the job. Thus, it is possible to determine whether he actually knows how to do the work. Obviously achievement test results are dependent on his original aptitude as well as on his training and experience. A trained and experienced man should do better on an achievement test than one who has had no training. Therefore, achievement tests are usually used in hiring skilled workers for jobs requiring long apprenticeships, such as machinists, toolmakers, electricians, accountants, typists, draftsmen, etc. Actually, when a supervisor interviews a skilled worker and asks him trade questions to determine his knowledge of machines and tools, he is giving him an unstandardized achievement test. Achievement tests are of little value for selecting inexperienced workers, but they do serve their purposes when used for selecting skilled and trained workers.

Aptitude Tests

Aptitude tests measure a person's capacity to learn a skill or job. Aptitudes, like intelligence, while dependent upon both heredity and environmental factors, are considered to be relatively stable capacities. Aptitude tests have one great advantage over achievement tests. They measure what a person's ability *can be*—what his potential is. Thus, before a man is trained or experienced on the job, a good aptitude test will predict how far he may be expected to develop after he receives training. They are excellent devices, not only for selecting inexperienced workers, but also for the proper placement of them.

Present Skill or Potential Capacity?

Is it always best to hire workers who have the greater amount of experience on the job? If we do hire them, we assume that

experience is the best teacher and that such workers will be more efficient than men of lesser experience. This is often a poor practice. Let's suppose that an applicant with only six months' experience is able to do as well, on an achievement test or on a tryout on the job, as another worker who has had three years of experience. Both workers produce 60 per cent of standard. Usually it would be wiser to hire the man with the shorter experience, since he has achieved in six months' time the same proficiency as the other has achieved in three years. We would expect him to surpass the more experienced worker in a short time because he probably has higher aptitude for the work. In the long run, for skilled operations, employees with the greater aptitude become the more efficient workers. While it may be easier at first for a supervisor to break in the experienced worker, the training effort which he must apply to the less experienced man with greater aptitude will pay off in the end.

Measurements for Other Traits

Several other types of tests which measure other human traits are being used more and more by industry and business. Tests for physical qualities of health, strength, endurance, vision, hearing, and color blindness are available, to determine whether the applicant has sufficient of the qualities to perform the tasks. Still other tests measure the emotional and temperamental qualities so necessary for many jobs. Included in such measurements are tests for nervous stability, self-sufficiency, dominance, introversion or extroversion, sociability, and many others. Other tests attempt to measure the temperamental qualities and seek to determine whether an individual is abnormal in these respects. Most of these tests have not been refined and developed as much as aptitude tests. If they are used, their results should be considered as only a *snapshot* which may reflect the status at the moment, since such

characteristics are dynamic and are constantly being modified by experience.

Another important area of measurement is the field of job interests. Interest analyses give information about a person's work preferences. They show how closely his interests match those of successful workers in different occupations. Such interest analyses are of great value, especially to young people who have not yet chosen a career. They are also useful in industry, because they make it possible to select workers who have the proper interest for the work; employees who enjoy their work are usually more dependable. Furthermore, by bringing together employees with similar interests, greater congeniality and better teamwork may be expected from them.

INVESTIGATING APPLICANTS

Before an applicant is actually employed, someone should make an investigation of his character and past performance. Letters of reference usually have little value, especially if they are presented by the applicant. Even letters which are written to past employers are often not very reliable, because most people hate to write about employees' shortcomings and bad characteristics. A few employers have even been known to write fine and glowing letters of reference in order to get rid of undesirable employees. A questionnaire sent to former employers or other references, requesting answers about weaknesses and deficiencies as well as good qualities, brings somewhat better results. A much better way to check up on an applicant is to *talk* to the former employer. In a face-to-face conference, questions can be asked and answered which might not readily be put in writing. If going to see the former employer is not possible, a telephone call may serve. The time and effort spent in checking up before hiring a man is a good investment. If it succeeds in eliminating even some

unreliable employees, troublemakers, alcoholics, and the like, supervisors have saved themselves and the company many headaches.

PLACING THE WORKER

Our remarks in this chapter have dealt with the screening of applicants for selection. The supervisor, cooperating with the employment office, can use his practical judgment, as well as interviewing, testing, and investigating, to select employees with the proper amount and kind of experience and the abilities needed for success in the company. The actual placement of the worker is really also part of the selection process. If the qualifications

Tests help in the training program too. R. E. Kline, National Cash Register's educational training director, discusses a worker's test record with Job Foreman Looper. (*Modern Industry*, Vol. 18, No. 1, p. 53, July 15, 1949.)

needed to do the work are well known, and if sound methods have been used to screen the worker, his placement in the right job will depend on how his individual abilities match the requirements of the particular job.

Selecting and placing the worker is too important to be a hit-and-run procedure. We should think of it, rather, as an important part in the total adjustment of the individual. A man spends approximately one-third of his life at work. Consequently, it is vital to his welfare, and also to the welfare of the firm, that his abilities and interests are matched to what is needed on the job. The abilities and capacities of individuals differ vastly. There is an enormous range in the qualities which workers bring to the job. The employee who can and does produce three times as much as his fellow factory worker is usually more satisfied with his job. Naturally the company is more satisfied with him too. But imagine the prodigious increase in production which would be possible if we could man all the jobs with the most apt workers. Think, too, of the improvement in morale and job satisfaction which could be attained. It has been estimated that about two-thirds of all the people who work are in the wrong jobs. That is not to say that they are failures but rather that they would be more successful and happier in other kinds of work. To determine the actual capacity and ability of a human being is no simple matter. It can't be done in an hour or so, even with the most refined technical procedures. We need to know a great deal about an applicant before we are reasonably sure that he will succeed in a given job. Even when all our resources are used, we may fall short. But combine the experience and knowledge of the supervisor with the best techniques of the employment office, and many of our present wrong guesses and failures will be eliminated. Proper selection and placement of personnel is a major part of a sound human relations program. You can't make a silk purse out of a sow's ear, and

it is nearly hopeless to try to motivate men to efficient production unless they have what it takes to attain it.

The supervisor who has taken an active part in selecting and placing the worker has already started the worker's induction, which is the subject of our next chapter.

QUESTIONS FOR DISCUSSION

1. Why should the supervisor pass final judgment on whether a man should or should not be hired for his department?
2. What part should the employment office play in the hiring of new personnel?
3. Why should we speak of the process of hiring a new worker as a cooperative process?
4. Evaluate the relative merits of the various sources from which employees may be recruited.
5. What are the main purposes of the hiring interview?
6. To what extent should you allow appearances to guide you in the selection of new employees?
7. What is meant by "rapport"?
8. How should psychological tests be properly used in the employment situation?
9. Describe briefly the process of test construction.
10. A supervisor has intelligence test scores on three prospects for a common laboring job. All three have sufficient physical capacity to do the work, but one is in the top 3 per cent of the general population in intelligence; another is in the bottom 3 per cent; and the third has a score which is equal to, or better than, the scores made by 25 per cent of the general male population. The supervisor hired the man with the highest test score. Discuss the merits of his selection.
11. Distinguish between achievement tests and aptitude tests.

SEVEN

Inducting the Worker

Do you remember when you started on your first job or on a new job? Weren't you a bit shaky, or perhaps downright scared? Didn't the strangeness and uncertainty of the new place and new people shake your self-confidence? Well, that's the way it is with nearly all new employees. It is the fear of the unknown that makes them tense and uncertain.

New Employees Need Assurance

Everthing is changed, too, from the way it was in the other places they have worked. Nearly everyone resists change. People like their old ways of doing things. It isn't until these unknowns become familiar, until the mystery is gone, that one regains his self-confidence and is able to work without tenseness or self-consciousness. This may take months if an employee is allowed to shift for himself on a new job, but when his induction is skillfully managed by the supervisor, a new worker may regain his self-confidence in a few days. So the supervisor who takes the time to get the new employee in the right frame of mind and to help him reestablish his self-confidence aids him to regain his assurance. The supervisor eases his own burdens too. The new employee takes his training in stride and soon becomes a pro-

ducer. The neglected worker picks up a lot of distorted ideas which warp his attitudes and create more problems for his supervisor.

The Supervisor Is the Company

That the attitudes of new employees toward job and company depend largely on what the supervisor does is shown clearly in the following incidents. The *foreman is the company* to them; they think of their work and firm in terms of their immediate supervisor.

A visitor who was going through a large assembly plant asked permission of the superintendent to speak to the newest employee in each of the three departments of the plant. After introducing himself to each new employee, the visitor asked this simple question, "How do you like your job?" Here's what the men had to say.

John B., Department 1: How do I like my job? Well, I've been here over two weeks and you're the first person who's asked me anything about it. My leadman started me off my first day and showed me how to run this machine okay, but I haven't really talked to him much since. He introduced me to my foreman, but I didn't catch his name; he's that short, gray-haired guy over there in the dark suit. Between you and me, I'm thinking of quitting. Can't seem to get to know the fellows here. This place may be okay for the old boys, but it's no place for a new guy.

Carl H., Department 2: When I came here I was jumpy; bosses always have made me nervous and I always hated them too. They always pushed me around to show me who was boss. But I don't feel that way now. The first day I was here, Mr. Simpson, he's my foreman, talked to me about myself and the kids. I was so slow I expected a bawling out when I started on this machine. But he said he'd started out on this same kind of machine and

that I was turning out better work on it than he did when he started. How could a guy hate a job when he has a boss like that?

DAVE L., DEPARTMENT 3: My job's fine because Mr. Burke is a swell guy to work for. He always seems glad to answer any questions you ask him. Last week he went to Jim Grady's house just to see him, when Jim's kid got hurt. Just yesterday he asked me if I'd like to go fishing with him.

TAKE TIME TO START THEM RIGHT

From these three replies, it isn't hard to guess which workers are most apt to stay with the company and become well-adjusted employees. From these cases it's pretty obvious which departments have the better morale. It's apparent that John B.'s foreman in Department 1 hasn't realized the importance of breaking in a new man properly. Or if he has, he's done little about it. Probably he felt so oppressed by his many other problems that he thought he just couldn't spend time with new employees to get acquainted right from the very start. He hoped that time would take care of it and that he would get to know them later. Now, that's just the crux of the problem; for in failing to take time to get new workers started off right, *he just creates more problems for himself.* The main job of a supervisor is to get men to work together harmoniously as a team; he is their leader. He can't possibly do all the work himself, nor can he take care of the thousands of details that come up to plague him constantly every day. He must depend on his subordinates to use their intelligence and abilities to take care of most of them. The supervisor's job, then, is to coordinate the workers' activities, to assist the workers by giving them the right information, by training them on how to do the jobs, and, perhaps most important of all, to help them attain the right attitudes so that they will be interested and will want to use their abilities to do

good work. Knowing your men is of prime importance. You can't afford to neglect taking the time to get well acquainted with them and to let them know you.

First Impressions Linger

You know how we all get first impressions when meeting a stranger and how strong and lasting those first impressions can be. It sometimes takes months of knowing a person to change them. Frequently our first impressions are all wrong too! That's why it is vital for a new employee to form the right first impressions. Whether he becomes a good teamworker or becomes a problem employee often depends on what happens during his first few days on the job. The slant he gets from the supervisor and the other workers goes a long way to mold his attitudes on the importance of his job and his satisfaction with it. No supervisor need ever worry about knowing any of his employees too well. But rarely does he ever have so good an opportunity to get acquainted and to build a friendly, confidential relationship as in his first contacts with him. Spending sufficient time with the new employee is like taking out an insurance policy for the future, for here is one of the greatest opportunities to make him feel welcome, to let him know that as a member of the team he is contributing to something worth while. It's a fine time to impart enthusiasm for the opportunities for advancement, security, and good fellowship in the company.

Steps for Good Induction

The process of helping a new worker adjust to his job and feel at home is called "induction." Five steps are common to the induction of most workers. They are (1) conducting an initial get-acquainted interview, (2) giving the employee information about the company and its products and policies, (3) providing the worker with information about his work, (4) introducing him to other super-

visors and fellow workers, and (5) helping him to make adjustments and seeing him often enough to assure that he fits in.

When interviewing a new man who has just reported for work the first time, it is well to try to imagine yourself in his place. Everything is strange to him: strange building, new employer, unfamiliar faces, and a new boss to please. Naturally, he is tense and nervous, and perhaps fearful. It is easy for a supervisor to forget that many workers have a constant fear of the boss and get excited or tense every time he is around. This is especially true the first day on the job.

The Get-acquainted Interview

The first time you talk to a new employee is one of the most important, if not the most important, of all conversations you have with him. Then he gets his first impressions of you and his new surroundings. As we have said, he is very apt to get most of his ideas about the company and its policies from what you say and do. For most workers, the immediate supervisor, more than any other member of management, is the company. The employee rarely sees the vice-president or the works manager or even the superintendent, but he sees his own boss every day. Your relationships with him are vital. You are in a strategic position to mold his attitudes and through your relationship to develop him into a competent employee. No wonder, then, that this first interview with him is so very important. First impressions are hard enough to change, and this is your golden opportunity to start him right. It is a mistake to try to impart too much information during the initial interview. Don't forget that the new man has so many things to remember that if many ideas are thrust upon him quickly, he will not retain them. It is a good practice, therefore, to plan in advance the things that you wish to take up with him during the first twenty to thirty minutes when you see him. If you

follow a topical outline, you won't omit anything. But if you do follow one, keep it out of sight or, better still, memorize it.

Perhaps the most important goals the supervisor could set to achieve in the first interview would be to make the new man feel at home, to make him feel he is welcome and that you are his friend and counselor. These are not achieved by overloading him with a lot of facts about the machines, products and methods, safety rules, and company policies. Everyone recognizes that these subjects are very important, but they should be discussed a little later, after a man has overcome some of his tenseness—later in the day, perhaps, unless the job is particularly hazardous.

Your first objective, then, should be to get acquainted with the worker as an individual and to make him feel that you are genuinely interested in him as a person. Almost everyone is willing to talk about himself if he feels he has an interested listener.

A Bad Start (Has This Ever Happened to You?)

Setting: the service-parts machining department of a tractor plant. Foreman Fred Harrison was having one of those mornings. His old sinus trouble was bad again, and everything seemed to be going haywire at once in the department. First, a power shutdown had stopped every machine in Section D. All the operators had been standing around for an hour and a half. He got that fixed up, only to learn that a material shortage held up Section B. The cylinder sleeves weren't ready, and a skid load of rocker arms hadn't arrived. To top that off, the fixture on the track link broach had cracked; that machine would be down for at least two days. Vance Smiley, his best milling-machine operator, was still out sick, and one of the horizontal drills had not been used for a week now—no operator. Well, thank goodness, a new man was reporting for that anyway. Poor Fred had been dashing madly about, putting out one fire after another all morning. Here it was eleven

o'clock now, and he hadn't had a chance to start that new operator, Gus Vanek, whom the employment office had sent down for the horizontal drill. The fact was he hadn't even seen him yet. Well, he just had too much for any one man this morning. He would have to send the leadman over to take care of Gus.

Our scene now shifts to Gus, who has been sitting outside the foreman's office since eight o'clock. Yesterday, when he was hired, the employment interview had been pleasant enough. The pay was right and, from what he had been told of the job, it seemed that at least he would be in a good outfit. Of course, everything would be very different from the small plant in which he had worked. But he didn't like this waiting. He was a bit jumpy anyway because everything was so strange to him. As he looked down the aisle of the vast shop, he saw a whole room full of mysterious equipment and machines. Strange faces, too, not a familiar face in the entire department. Four times now men had come dashing into the office trying to find the foreman. There seemed to be a lot of confusion as well as noise out there. This waiting didn't help his nervousness either.

"Are you Gus Vanek, the new horizontal-drill operator?"

"Yes."

"Well, I'm Engdahl. You're going to work in my section. I'm your leadman. The foreman sent me over to get you started. Come along with me and I'll show you your machine."

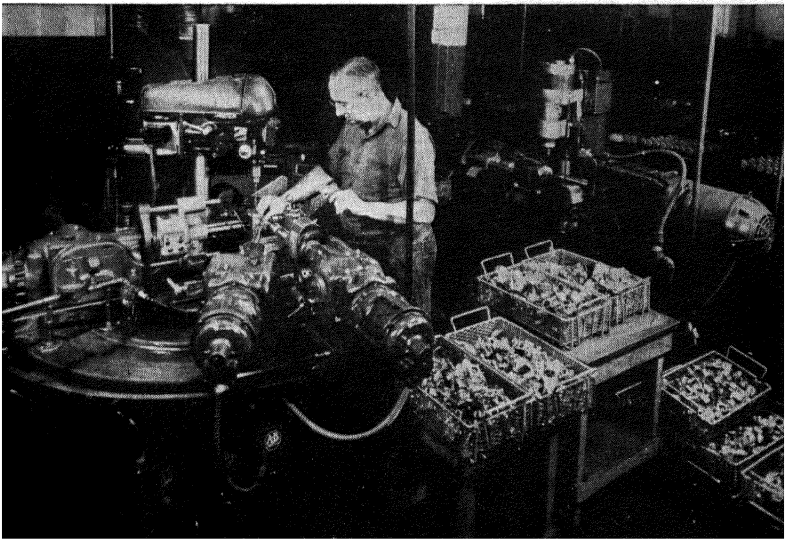
The long trip down the aisle, the staring, strange faces, and the noise added further to Gus's confusion. He had been accustomed to a small and quiet shop where he knew everybody. Maybe he had been too hasty in leaving there, even if this job did pay more. Well, he'd give it a whirl.

"I hear you've worked on a horizontal drill," Engdahl said "Well, here's your machine and here are the parts. It's all set up, so you shouldn't have any trouble. I'll run one through for you; then you can take over."

With that, Engdahl quickly set in a part, started the machine, pulled the feed handle, and, when the cycle was completed, removed the drilled piece.

"Stack them over there and the trucker will pick them up. You shouldn't have any trouble with this if you know how to operate a drill. Just be sure to let your feed clutch out slowly or you will break some drills. Watch your step now! The last guy that worked this machine got his foot smashed; a casting fell on it. You've got to obey the safety rules around here if you want to get along all right." And with that he was gone.

There stood Gus—he still had on his coat and hat—staring rather hopelessly at a new and unfamiliar machine. He didn't want to ask questions for fear that he'd seem green to the leadman. Still, it was plain that this drill was operated differently from the one he had learned on. He hadn't punched in yet. In fact, he



Gus tried to figure out how this drill should be operated. But poor induction and worse training added another casualty to the personnel turnover record.

didn't even know where the time clock was. Gus put his coat and hat over the finished stock bin and tried to figure out how this horizontal-drill press should be operated. The leadman had mentioned a clutch; his old machine didn't have a clutch. It had a worm-gear feed. Gus figured out what he thought was right, but he let the clutch out and he thought he heard something snap. He couldn't tell just what. Well, anyway, he thought he had the hang of it. So he plodded away till the noon whistle blew. He followed the others to the cafeteria, where he had a lonely lunch.

About three o'clock, Engdahl came around again to check his work. It didn't help Gus's confidence any to find that he had broken one of the drills and that all his work would have to be done over. Perhaps his first impressions of the new job are best summed up by his comment to his wife that night. "This is the first time I ever saw an insane asylum operated by the inmates."

Gus's story is a minor tragedy which occurs many times every day. It should surprise no one that Gus quit—one more casualty on the personnel turnover record. Here was a potentially good operator lost to the company. All the trouble and expense of hiring was wasted; and what is worse, one more person was added to others in the community who give the company a black eye every time it is mentioned.

Gus's foreman could have prevented all this. With a little time taken from his mechanical duties and spent on his human problems, he would have started Gus off right. Getting to know him as an individual, giving him a friendly welcome, explaining the job, and introducing him to his fellow workers probably would have started Gus off with a wholesome attitude from the beginning. Obviously, the leadman needs training, too, in breaking in a man. A little more time taken to show his new employee through the department, to explain how the part he worked on fitted into the company's finished product, would give the new man a feeling of doing an important job. Time spent to explain the details of

which, when, where, why, and *how* could make him proud of his work. Lunch, eaten the first day with a friendly fellow worker, who explained about the union, the bowling league, the Employees' Association, and who made suggestions on transportation, still might have salvaged Gus.

Schedule and Plan Inductions

The supervisor who neglects his new employees only adds to his own troubles. The employees must know what he expects of them, and he must understand them. The human problems are the supervisor's most important duties. His men can't be efficient if they are tense in his presence or if they dislike him. The importance of careful induction is recognized by progressive firms which regularly schedule orientation training programs where all new employees gather to hear lectures and discussions on the history of the company and its products. Sometimes films are used and demonstrations of the products are staged. Every effort is made to make the new employee a member of the team and to instill pride in the work he does in making an important product or providing an essential service.

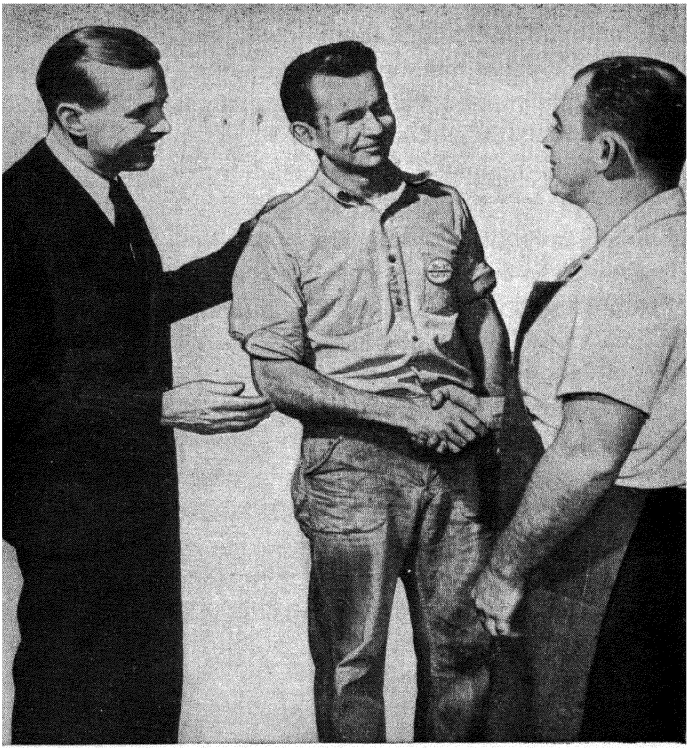
Schedule and Plan Inductions

For the best results, a planned program or schedule is followed. Here is one which has been successful.[1]

First Day

1. On arrival at the plant, the new worker is introduced to his supervisor by the person who did the hiring.
2. Supervisor interviews new employee to
   a. Get acquainted with him personally

[1] Adapted from material developed by the Training Within Industry Branch of the War Manpower Commission.



Introducing an apprentice to a journeyman machinist is one of the first steps in the joint labor-management apprenticeship program started several years ago at Lockheed by District Lodge 727, International Association of Mechanics, and the management of Lockheed Aircraft Corporation.
(*Courtesy International Correspondence Schools.*)

b. Give information he needs about transportation, starting time, rest periods, lunch periods, hours of work
c. Review pay agreement; when, where, and how much he will be paid
d. Give worker opportunity to ask questions.

*

3. Following induction interview, supervisor introduces worker to his group leader.
4. Group leader gives further details about department and
   a. Takes him on trip through department with explanation of products
   b. Shows him his locker, location of washrooms and lunchroom
   c. Shows him how to punch time clock and where to file card, and explains punching regulations
   d. Explains rules regarding smoking, absences, leaving the department
   e. Shows him where he is to work and introduces him to near-by employees.
5. Group leader gives job instruction.
6. Neighboring workers take new employee to cafeteria and eat with him; show him recreation facilities and introduce him to other workers.
7. After lunch, trainer conducts job instruction.
8. One-half hour before closing time, supervisor gives him his pass and hands him company booklet of rules, regulations, and policies to read at home.

Second Day

1. During morning, for one-half hour, supervisor reviews booklet, to be sure he understands rules, regulations, and policies, and to give him an opportunity to ask questions.
2. Safety engineer gives detailed instructions on safety regulations.

Third Day

1. Member of personnel department meets with worker and all other new employees of department to
   a. Tour the plant

b. Explain the history and organization of the company
c. Explain employee benefit plan and other employee services.

Fifth Day

1. Supervisor holds follow-up interview to
   a. Give employee opportunity to ask questions
   b. Clear up any mistaken ideas
   c. Find out employee's attitudes.

Costs of Employee Turnover

Induction of a new worker is a definite part of his on-the-job training process, but it has other values to the company as well. One of these is to reduce employee turnover. Employee turnover is appallingly expensive, and much of it is entirely unnecessary. Just what it costs a company depends on the company's products and operations. About 80 per cent of all turnover takes place during the first three months of employment. Cost analyses which have been made in many companies show that to hire, break in, and lose a worker within three months costs between $300 and $1,800. Many of these turnover costs are hidden. They include such items as advertising, interviewing, investigating, medical examinations, and clerical expenses. The inducting and training process costs more, for example, the expense of extra supervision, training, slower production, errors, scrap, and damaged material and equipment. Then there are general over-all costs which include overhead (it usually costs a manufacturing company several thousand dollars just to set up and maintain a place for a man to work), light, heat, janitor service, taxes, and insurance. Even after a man has left the company, these turnover costs continue; unemployment compensation may be a considerable item and, what may be most costly of all, the impaired customer and public relations due to the complaints of an employee who is angry at

the company when he leaves. Careful selection and induction are insurance against the unnecessary costs of employee turnover.

Here the supervisor has a fine opportunity to contribute to the welfare of his company. All the steps in the induction of the worker are directly related to his job satisfaction. The supervisor who spends the necessary time to start the new employee off right makes real progress in welding his group together as a team and in increasing the efficiency of his department, thus reducing the operating costs and improving morale. He has made a contribution toward building better employee attitudes toward the company and between management and worker. He has also made a fine start on training the worker, which is the subject of the next chapter.

QUESTIONS FOR DISCUSSION

1. To what extent are the five steps in inducting the worker carried out in your shop or office?
2. Criticize and discuss the way in which you were inducted when you began your present job or your present employment.
3. Estimate the cost of turnover for the average job in your shop or office. Tell how you arrive at this figure.
4. Make a specific induction outline for your department.

EIGHT

The Supervisor Trains the Worker

It was Al's first morning on the drill press. For some reason, the drills kept breaking on him. His foreman gave him the first three or four replacements without comment. When this kept up, though, he figured Al was just no good on the job. He finally told him off and fired him. After Al left, other drill-press operators looked over his machine. They found a defective chuck. Nobody could operate that press and not break drills. Grievance machinery was put into action. The ultimate result was a brief, but nevertheless costly, shutdown.

Bob had been with the Ajax Dry Cleaners for three months, but this was the first time he had been told to help sort the incoming delivery of soiled clothes. Six people were already in the bin, tossing coats, pants, dresses, and about every other kind of garment you could imagine into almost a dozen piles along the sides of the bin. He didn't want to make mistakes, but nobody told him what to do. The fur-trimmed coat seemed to go in this pile, white suits in that. "What about this dress with sequins on it?" he asked Joe. Joe has been in dry cleaning for maybe forty years.

"Put it there."

"How about this?"

"Over there," Joe told him willingly enough.

It took just about five of those questions before Joe stopped and

said to Bob in a confidential tone just slightly tinged with impatience, "Don't ask so many questions. It makes you look dumb!"

Bob was anything but dumb. He'd try to do the right thing, but in case of doubt just close your eyes and throw. If somebody's dress was ruined just because it got into a wrong pile, they'd never know who put it there. Anyway, for all he knew, maybe it didn't make any difference. . . .

At the Harwood Manufacturing Corporation, annual turnover among learners was high, too high; furthermore, it didn't seem to make sense.[1] The closer the learners came to standard production, the higher the turnover rate. At 60 units an hour (standard), turnover was only 7 per cent. But at 30 units, it was 12 per cent; at 45 units, it increased to 60 per cent; and reached an incredible 96 per cent at 55 units an hour, just 5 short of standard. Apparently the closer the worker approached his goal (standard production), the harder it seemed for him to reach it. He became discouraged, and the tendency to quit his job was great. But those who actually reached standard sensed achievement and self-satisfaction. Low turnover prevailed in this group.

Each of these three illustrations tells us something about training. Each points to faults that could be at least partially corrected by wide-awake supervisors who recognize that a major portion of their jobs is instruction. With proper training Bob would have made fewer mistakes; and, what is more important, his attitude toward his work and his company might have been far better. Al would have known that his chuck was broken, and his foreman would have had a better working relationship with his men. As for the Harwood Manufacturing Company, encouragement during the learning process would help the worker. Give him subgoals to work for—goals he can reach. Let learning be accompanied by a series of actual achievements and their attendant

[1] ANON., Industrial Psychology Pays in This Plant, *Modern Industry*, Vol. 15, No. 7, pp. 67*ff*., 1948.

satisfactions. This was actually done by Harwood, a forward-looking company. They licked the turnover problem during the training period. However, recognition of the importance of training is not enough. Foremen must also have some knowledge of how a worker learns, why he learns, and what he learns. With this knowledge he can do a better job of training and a better job of building up good human relations in his shop.

How We Learn

In one sense nobody knows how we learn. In all the universities in the world there is no one who can tell what happens in us or in our nervous systems when we learn a new phone number or a new job. That's all right. Nobody knows exactly what electricity is either, but that doesn't stop us from knowing a great deal about how it acts and what it does. So it is with learning. We know many of the things which affect it, things which make it easy and things which make it hard. And, furthermore, we can measure it. This is important, for in a very real sense it is only by measurement that we ever get any real knowledge about anything—metals, chemicals, electricity, learning. . . .

Learning can be measured in a number of ways. The examinations you took in school were simply measurements of what you learned. Of course, this is not a direct form of measurement; it's not like using a micrometer to measure the diameter of a steel shaft to ten-thousandths of an inch. Learning isn't measured directly, but then neither is temperature. Both are measured by the effects they produce, temperature by its effect on the length of a column of mercury and learning by the effects it produces on performance.

Learning and Performance

How then does learning affect performance? It increases production rates and amounts of production. It decreases the amounts

of scrap, number of errors, and quantities of materials used in production. It reduces the time to do an operation. It increases feelings of confidence and improves morale and attitudes. It reduces effort and strain in doing a job. It decreases turnover and absence. Each of these effects of learning can be measured, some more accurately than others, to be sure. But the important thing is that learning can be measured and in a variety of ways.

Figure 1 shows some of the many ways in which the course of learning can be plotted. Graph *A* shows one common type of learning curve. It indicates that production, as measured by the number of units produced—perhaps the number of electric irons or toy racers or carburetor assemblies—increases on each successive day of practice until it levels off. In this imaginary case, it leveled off after 16 days of practice. Suppose that this graph were made by averaging the daily production of a large group of trainees. At a glance, then, it would answer a lot of questions about the progress of these people in learning to be efficient workers. For example, we would know that on the first day the average learner would produce about 22 units and that after 8 days he should be producing about 30 units. After 16 days he should have reached peak efficiency (32 units). Much more progress would be expected during the first 8 days of practice than during the next 8 days. In fact, between days 8 and 16, an increase in production of only 2 units could be expected, whereas between the first day and the eighth day there is an increase of 8 units. If 32 units represent standard production, we should probably assume that further practice will not bring about any increase in production rate. We could then say that the worker is on his final plateau. *Plateaus* in learning curves are flat places which indicate no progress is being made.

It is often the case, however, that changes, either in motivation (*e.g.*, by increasing incentive pay) or in work methods, lead to further increase in production *after* it has already leveled off at an

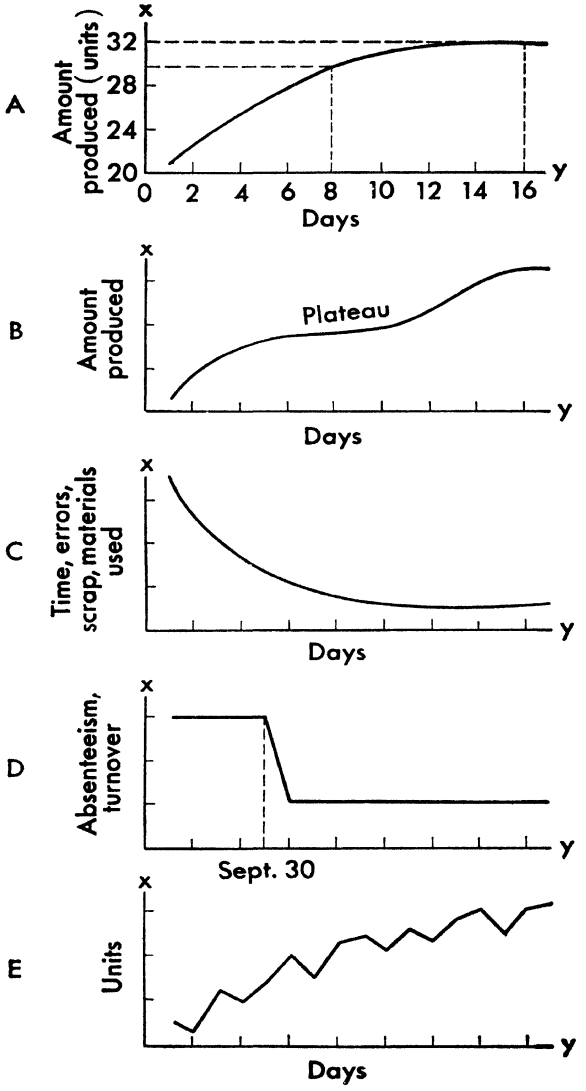


FIG. 1. Types of learning curves.

apparent maximum. In some learning situations, too, progress slacks off regularly in the learning period, for less obvious causes. These situations are represented in curve *B*, which has a plateau halfway through the learning curve. In charting the progress of learning to receive telegraphic code at main line rates, this type of curve is often found. It is also noted in the learning of looping in the textile industry. When these plateaus occur normally in learning, it is very important that the supervisor know of their existence; for it is here that workers often become discouraged and drop out of training with the feeling that they can never reach standard. In one company, workers are given a card showing a typical learning curve for their job, with the plateau clearly marked. With the aid of this card, the foreman is able to show these people who hit the plateau that if they stick to their jobs they should expect to make the standard rate, even though they seem stalled for the time being. Plateaus undoubtedly occur normally in the learning of many jobs. If the supervisor expects and anticipates these plateaus, he may be able to prevent many a potentially good workman from becoming discouraged and quitting because of his fear of not making the grade.

Graph *C* shows learning in another way. It shows that the time required to do a single job decreases as practice goes on; or it shows that fewer errors are made or that less material is scrapped or is used needlessly as skill develops. In *D*, an indirect advantage of a good training program is shown. Suppose daily absentee rate or monthly turnover is high among trainees. Then suppose that on September 30 a new training program is introduced. If absenteeism or turnover decreased to the extent shown in the graph, who wouldn't be impressed by the merits of the program?

The last graph (*E*) shows simply what the training curve of an individual employee is likely to be. Progress in learning is not smooth, but the upward trend is unmistakable.

Why bother with training or with learning curves? Dave All-

bright, a smart foreman, took the trouble to plot them for his trainees. He quickly spotted weak men who needed extra help; he saw plateaus developing and gave reassurance; he kept his men working against their own records and the records of other trainees by showing them their daily progress on the curves. Friendly rivalry and competition developed. The upshot of it all was that training time was cut. Dave's superiors were impressed by the fact that not only did he know how his men were progressing but also that he could show management exactly what was happening. Dave's slated for promotion now!

Learning Is Transfer

After you have learned to play your first game of cards, it is easier to learn to play other games of cards. Why? Well, you know what the different suits are; you know how to handle the cards; you know about shuffling the deck; and you know the names and values of cards. In other words, there are many facts that are common to every card game. If you learn them for one game, they apply equally well for all games. This is what is meant by *transfer of training*. The facts learned in one situation are carried over or transferred to the other situations, particularly to similar situations.

Two groups of boys are shooting darts at a target submerged under water. Their scores on each shot are kept. At the end of a number of trials, the scores of the two groups are compared. One group seems to be just about as good as the other; both appear to be improving their aims at about the same rate. Then the depth of the target is changed. Now one of the groups seems to pull ahead of the other, has more bull's-eyes, shows better accuracy. What is the difference between these two groups of boys? Before the experiment started, the group of boys who finally made the better scores had had an explanation of the principles of light refraction—how the light rays bent as they emerged from water

to air. They knew in advance that a target under water is not where it appears to be. That knowledge didn't help a great deal on their first practice on the underwater target, because they had to learn a lot about dart shooting. They had to learn by *actually doing*. But when the target was changed, the principle they had already learned, the theory behind their job of dart shooting, helped them apply their developing dart-shooting skills quickly to the changed conditions. The uninstructed boys had to use trial-and-error methods until they could get "on the beam" again.

The results of this simple yet important experiment have constant application in shop training. For example, in radio assembly, parts must be made to exacting specification; wires must be attached in specific ways to specific terminals, and so forth. Yet most assemblers and part makers haven't the vaguest notion why this is so necessary. Perhaps a few minutes spent in explanation of the whys and wherefores of certain aspects of radio and electricity would have saved one manufacturer of radios the thousands of dollars he had to spend in correcting defective sets.

These experiments tell us something else about learning and transfer. *Transfer of training* and skills from one situation to another or from the learning situation to the job *will be greatest when the learner has some knowledge of the principles that lie behind the job he is learning*. The more complete the understanding of those principles, the better.

So far we have seen that training in one task will transfer to another task; that is, from one card game to another there is an effortless transfer of basic knowledge. We have also seen that principles learned in one situation can make the mastery of other situations easier, as in the underwater target experiment. Now, how about the transfer of general work habits, habits of neatness, punctuality, industriousness, regularity, orderliness, and even honesty? When we examine ourselves and others closely, we begin to see that these habits instead of being general personality

characteristics of people are quite likely to be specific to certain situations. We all know people who are neat in their dress but sloppy in their work, who can work hard for their clubs but who shirk their jobs, who are late for work but never miss a kickoff at the football game. Even honesty is not so much a matter of how honest *you are,* but rather in how many of your activities you are honest. You could trust John with a million dollars cash, even if he were desperate and broke; but he made a beautiful little model airplane engine on company time and with company tools and materials.

Regardless of the job we're teaching a man, we want him to develop certain good work habits to go along with it. Mostly, however, we figure he either has them or he hasn't; and there isn't much that can be done about it anyway.

Dave Allbright thought he had done a good job of training his men to be neat. If you had seen his department, you would have agreed with him; it was spotless. Just as a check, he thought it would be interesting to see if workers trained in his department and transferred elsewhere in the plant still kept their work places in good order. To his surprise, they seemed no neater than they had been when they first entered his department. They had learned their lesson in neatness well enough, but they had simply learned to be neat in *Dave's department.* They hadn't become neater people. Transfer didn't occur automatically.

If Dave had wanted to establish general work habits of neatness, he would have had to take a more general approach to the training problem. He might, for example, have stressed the importance of neatness to all work; he might even have brought in such things as neatness in dress, in the house and elsewhere. That this is true is well-known to educators and training experts who have studied the problem. In order to get habits like neatness and accuracy to transfer, it is necessary to point out their general importance—to make them ideals. They can be taught, but they

must be stressed on *each* new job. Their general importance as work habits must be pointed out to the worker; he must understand their significance so that finally they can become firmly established as habits.

Not All Transfer Is Good

Have you ever had the strap on your wrist watch break? You carry the watch in your pocket until you get a new strap. When you want to know the time, chances are you'll look first at your wrist and then remember that your watch is in your pocket. Your old habit interferes with the setting up of the new habit.

One textile manufacturer found that new workers came up to standard production in eight weeks, whereas workers experienced in other operations took an average of twelve weeks to reach standard. In fact, the reason for the longer training time for the experienced workers was the fact that their old work habits interfered with the setting up of new habits.

The pilot of a transport plane instructed his copilot to adjust the flaps on the take-off. The copilot pulled the lever; and the landing gear retracted, causing a serious accident. The wrong lever was pulled, even though the copilot knew which lever was the right one. In the plane from which he had just been transferred, the lever controlling the flaps was in the same position that the landing-gear-control lever occupied in the transport. A momentary confusion was all that was needed to set the stage for the accident.

Each of the above situations illustrates how previous training or practice interferes with the development or use of new habits. When transfer causes such interference, we call it *negative*; when it helps new learning, we call it *positive*. These two opposing tendencies actually occur at the same time. Whether the net result will be positive or negative depends upon which tendency predominates. While psychologists have formulated principles

which aid in predicting whether positive and negative transfer is likely to occur in a given situation, these principles are not established to the point where they can be easily applied to most practical training problems. It is important, nonetheless, for one to recognize that transfer may be both positive and negative.

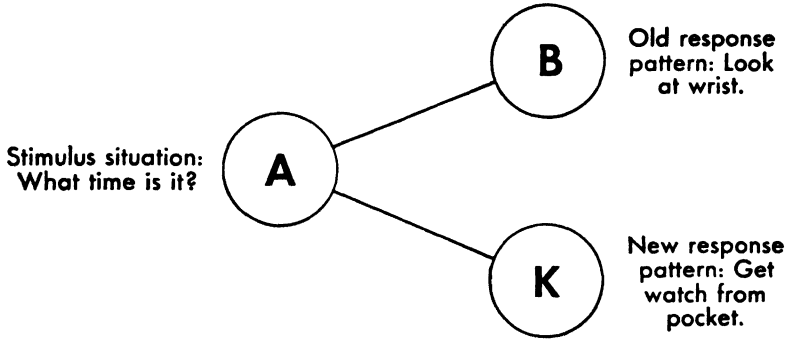


FIG. 2. Negative transfer.

One rule can be given that is helpful in spotting in advance those situations which will almost always bring about *negative* transfer: If a stimulus *A*, which ordinarily leads to a response *B*, now must lead to a new response *K*, the new response *K* will be difficult to set up. (See Fig. 2.) Thus, the stimulus, "What time is it?," has always in the past meant, "Look at the watch on your wrist." After the watch strap has broken, however, the question, "What time is it?" should make you reach for your watch pocket (response *K*). The chances are, though, that it will be a long time before you overcome the old habit and reach directly for your pocket. Furthermore, you will have much more trouble setting up the "pocket-reaching" habit after you have already learned the "wrist-looking" habit, than if you had never carried a watch before and had just started to carry a pocket watch. The old habit interferes with the new.

Because of the negative transfer, it is important that a worker learn and practice correct methods of work. Suppose you are training a man to use a grinder. For his safety he must put on goggles before he starts the machine. In training him, however, you didn't insist that he first put on goggles. You were more con-

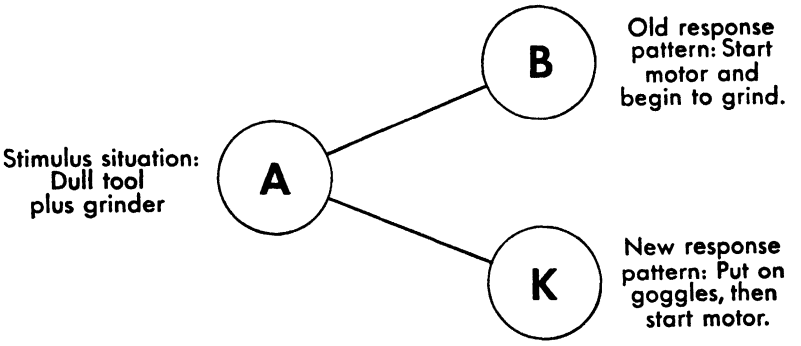


FIG. 3. Negative transfer.

cerned with the way he held his tool to the wheel. Later you find that he constantly ignores his safety goggles. He tells you that he just forgets to put them on. Figure 3 shows how we can diagram this situation.

The new response *K* is going to be a lot harder to set up, because you allowed the first response *B* to become established. The worker must learn and practice only correct methods of work. If you allow incorrect methods to become established, it sometimes becomes impossible to change them. Avoid negative transfer wherever it is possible.

WORK METHODS

Because of negative transfer, therefore, it is essential that the supervisor pay particular attention to the exact methods of work used on every job he attempts to teach the new worker. The cor-

rect method of doing the job must be carefully determined. The supervisor should work this method out very carefully for himself and should base his instruction upon it. This work procedure or method should be written down, and it should serve as his personal guide to which he will constantly refer while teaching. The skilled worker often takes a lot for granted because he knows his work so well. Certain parts of the job seem obvious and not worth mentioning. Yet it may be just these unemphasized parts of the work that throw the learner. The trainee may appear stupid, not because he is, but because his teacher expects more of him than is at all justified. Any one of us can be made to appear dumb by an expert who does a sloppy job of explaining a new work method, even if it does seem absurdly simple to the expert. Therefore, the purpose of the written job description for training is to remind the instructor constantly that all important steps and key points of the job must be covered.

In Table 1 we see a job breakdown of the sort actually used in training. The steps and key points don't mean much, if anything, to us. It is not intended to be used as a complete and understandable job description. It is made for personal use. Actually it serves the instructor in the same way that a careful but brief set of notes aid the lecturer. We are primarily interested in the form. This particular form was developed by the Training Within Industry Service of the War Manpower Commission.[2] It was used in their Job Instructor Training course, which was given to thousands of supervisors during the war. Let's look at how the breakdown was made. Remember it is the first step in training. The important steps are given in the left-hand column. A step is considered to be "a logical segment of the operation when something happens to advance the work." This doesn't mean that

[2] ANON., "Training Within Industry Report, 1940–1945," War Manpower Commission Bureau of Training, U. S. Government Printing Office, Washington, 1945.

TABLE 1. BREAKDOWN SHEET FOR TRAINING MAN ON JOB #18

Important steps in the operation	*Key points*
A *step* is a logical segment of the operation when something happens to *advance* the work	A *key point* is anything in a step that might make or break the job, injure the worker, or make the work easier to do, *i.e.*, a "knack," a "trick," special timing, or a bit of special information
1. Place piece on plate against regulating wheel	"Knack"—don't catch on wheel
2. Lower the lever feed	Hold at end of stroke (count 1–2–3–4) Slow feed—where might taper Watch—no oval grinding
3. Raise the lever release	
4. Gauge pieces periodically	More often as approach tolerance
5. Readjust regulating wheel as required	Watch—no backlash
6. Repeat above until finished	
7. Check	

every possible step is given. Some steps are incidental and take care of themselves.

Key points are important. In a way, the step tells you what to do, and the key point tells how it should be done. They are the points which make or break the jobs, the safety factors, the knacks and tricks. The step tells you to attach the wire to a terminal; the

key point tells you that the black wire goes to the right-hand terminal or else!

Making a breakdown is not a waste of time. It's one way of making sure that you really know the job yourself. Auren Uris gets this point across in a good story.[3] Raven, an old foreman, is breaking in his successor, Phil Starr. A new girl has been hired, and she will have to be trained when she comes to work the next day. Phil wants to try his hand at the job of training. Raven tells him that he had better study the drill-press operation he is to teach, so that he will have a good breakdown before the new worker comes in. After Phil watches their best operator for 15 minutes, Raven comes over and asks, "You getting it, Phil?"

"I think so."

"I'll bet you two bits you can't run that drill according to method."

"I hate to take your money."

Phil relieves the operator and starts to work. Before long, Raven stops him.

"You can hand over that two bits now. You've already made three mistakes."

Raven then pointed out the mistakes. Phil shouldn't have aligned the strips. In kicking the pedal, Phil stepped forward and back. It should be heel and toe, no leg movement. Phil threw a single finished piece in the box. Wrong. Finish them all before putting them away. Phil handed two bits to Raven—at that, a cheap lesson.

In substance, this incident happens many times, with one difference, however. Not every supervisor is fortunate enough to have Raven watching out for him. It's a good story because it illustrates why so many attempts at teaching fail, even before any actual teaching is done. Before Phil could make a good job

[3] AUREN URIS, "Improved Foremanship," pp. 167–168, The Macmillan Company, New York, 1948.

breakdown, he had to be sure he knew the job method. Sure, the job was an easy one, but there was a right way and a couple of dozen wrong ways. Start a worker on the wrong way, and it becomes a much more difficult task to get him straightened out in the right method. Remember *negative transfer.*

Training Method

We've just finished discussing how important it is to break down the job before you start training. It goes without saying that the job method you are going to teach should be the best method of work possible under the circumstances. Well, training is a job. It's one of the most important jobs the foreman has. Since it is so important, one should be able to present a breakdown of job instruction that should represent the "best" method of job training. If the method is good, it should produce results. How are these for results? [4]

In an optical plant, green men took from four to six months before they "made production" in lens grinding. Could their time be cut? The training department was never able to get a toe hold in the lens-grinding department. "What! Let these long-haired characters from training come in and gum up production with their half-baked ideas?" Expansion brought in a new department in another building that had to start with new men. Here was the chance to try out a method of training that had been used successfully elsewhere. A foreman was trained in the methods of job instruction, and three men were assigned to him on a test basis. By the end of the first day, all three had ground satisfactory lenses without any scrap whatever! It was estimated that in six weeks over 100 persons would be working in this department and that all of them would be "making production."

During the war, the Curtiss-Wright Corporation, in Louisville, was engaged in assembling the famed C-46. The cost of scrap was

[4] "Training Within Industry Report," *op. cit.*

running 61 cents per worker on the average. In one department, where all supervisors and foremen were trained in this method of job instruction, the per capita cost ran only 15 cents. In another department, where 83 per cent of the supervisors were trained in the method, scrap cost was 27 cents per worker. In a third department, where only 25 per cent of the foremen received this job instruction training (fewer than the average department in the plant), scrap costs ran 65 cents per worker.

Other results as spectacular as these could be cited, such as the experience of the Long Island City plant of the General Cable Corporation and of the Easy Washing Machine Corporation. Thus, the former plant reported early in January that its production was running 4,600,000 feet of cable; scrap ran 15 per cent; turnover, 25 per cent; absenteeism, 16 per cent. Sixty-seven of its supervisors were given training in job instruction. By April, production reached 10,000,000 feet; scrap dropped to 8 per cent. The major reason given for the improvement was the fact that the supervisors had been given a good and serviceable tool in the form of a method to train workers.

What is this method? Table 2 tells the story. This is the breakdown of job instruction developed by the Training Within Industry Service of the War Manpower Commission during the war. Read it now before going on. Like other government war projects and agencies, we refer to it by initials—JIT, for Job Instruction Training. The results briefly sketched above were obtained by the use of this method in various war industries. Its peacetime significance cannot be overlooked. Nor is it by such progressive outfits as Western Electric Company. The method was taught in a series of five two-hour conferences in which the participants actually trained each other on sample jobs they brought into the meetings.

Let's examine the method. Since good instruction depends on good preparation, we see four major steps to be followed in getting ready to instruct. The timetable serves as an incentive to both

TABLE 2. INSTRUCTION OUTLINE

HOW TO GET READY TO INSTRUCT

Step 1. *Have a timetable–*
how much skill you expect him to have, by what date.
Step 2. *Break down the job.*
List important steps.
Pick out the key points (safety is always a key point).
Step 3. *Have everything ready–*
The right equipment, materials, and supplies.
Step 4. *Have the workplace properly arranged*
just as the worker will be expected to keep it.

HOW TO INSTRUCT

Step 1. *Prepare the worker.*
Put him at ease.
State the job and find out what he already knows about it.
Get him interested in learning the job.
Place in correct position.
Step 2. *Present the operation.*
Tell, show, and illustrate one *important step* at a time.
Stress each *key point.*
Instruct clearly, completely, and patiently, but no more than he can master.
Step 3. *Try out performance.*
Have him do the job–correct errors.
Have him *explain each key point to you* as he does the job again.
Make sure he understands.
Continue until *you* know *he* knows.
Step 4. *Follow up.*
Put him on his own. Designate to whom he goes for help. Check frequently. Encourage questions. Taper off extra coaching and close follow-up.

If the worker hasn't learned, the instructor hasn't taught.

the trainer and the learner. We need goals primarily for the satisfaction we receive in attaining them. This item also helps in planning for training needs and should help in scheduling train-

ing duties. The breakdown has already been discussed, but its importance should never be underemphasized.

Why is it so important to have all the right equipment, materials, and supplies ready? For the same reason that it is important that the workplace be arranged just as you expect the worker to keep it. "The worker must be taught and must practice only correct methods of work." [5] Correct methods involve the kind of equipment and materials used. And certainly the way the workplace is kept is a part of method. Simply telling a man that his bench should be kept in such and such order won't do much good, if you are actually showing him that you can still do the job regardless of the order in which things are. A bad habit is being encouraged. Again, remember *negative transfer*!

Now look at the four steps of How to Instruct. A lot more time should be spent on *Step* 1, preparing the worker, than is ordinarily realized. If the worker is completely new to both you and the shop, you must be absolutely sure that the edge is taken off that newness. There is good reason for this. If the worker isn't at ease, he'll have a very hard time attending to what you want him to do. He'll try to listen, but a lot of interfering thoughts will enter his thinking: "I wonder if I'll like it here . . . This job seems hard . . . I wonder what this foreman thinks of me . . . I'd better wrinkle my forehead so he'll know I'm trying to follow him . . . Maybe I'd just better pretend I understand—I can dope it out later," etc., etc.

Find out what the worker knows about the job; then you can build upon that knowledge. But make sure he really *knows what he says he knows.* There is always the possibility that he may be trying to impress you with a lot of superficial knowledge. Then, too, what he thinks he knows might not be correct; that has to be straightened out.

[5] M. S. VITELES, "The Science of Work," W. W. Norton & Company, New York, 1934.

A good way to get the learner interested in the job is to show him just how important it is. Every job is important, or you wouldn't be paying good wages to get it done. But apart from that, every job fits into the production scheme. Show the worker just how it does this. Do you have to drill holes in this part? Tolerances are fairly liberal. But look at all the trouble caused by a hole just a trifle out of alignment. Somebody else has to ream it out later in the assembly operation so that a proper fit can be made. No, you don't reject the piece, but it certainly can cause the next fellow extra work, and a headache to boot. Another recommended procedure is to show the worker the completed product. Let him see just how his work fits into the whole product. In and of themselves most production jobs are pretty meaningless. Best learning occurs when the worker understands the meaning of his work and feels that he's making a worth-while contribution.

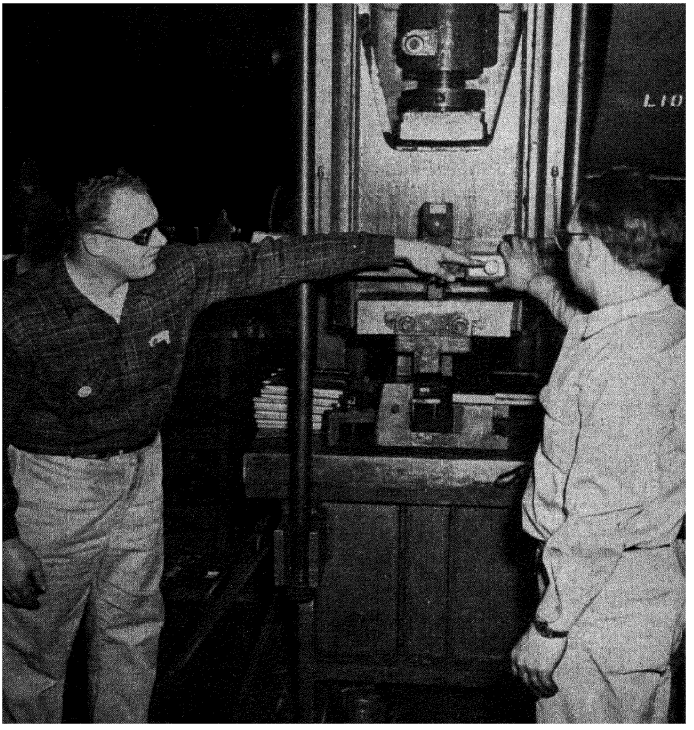
Remember doing group setting-up exercises when you were a kid or in the army? The instructor faced the group and had you follow him. If he lacked experience, he said, "Bend to the right," and then he bent to *his* right. What happened? There were sure to be a couple of people bumping heads. Some of them did what he said and bent to their right. Some did what they thought they saw him do and bent in the same direction he did, *to their left*! What does the good instructor do? He says, "Bend to the right," and then he bends to his *left*. No errors that way. Now what happens in job training? If you are working at a bench, the best place for the learner to get a clear view of what you are doing *appears* to be facing you on the opposite side of the bench. If he stays there, you'll either have to do the job backward or he'll learn to do it backward. The simple solution is to place him at your side, so that he can see the job being done in the right way, and not the mirror image of the correct motions. Moral: *Place in correct position.*

We're ready for *Step* 2. *Present the operation.* We use our job

breakdown here, proceeding just one step at a time. We must keep in mind two points:

1. Telling alone is not enough.
2. Showing alone is not enough.

Every step should be described verbally as completely as possible; and while you are describing it, you should show the learner exactly what you mean. Don't be afraid to refer to your break-



The good trainer has the worker try out the performance while he watches. After the worker has gone through the job once, the trainer has him do it again. But this time the worker must explain each *key point.*

down. If you haven't memorized it, keep it where you can follow it exactly. If you aren't sure, don't trust your memory; check the job breakdown. It doesn't mean you don't know the job well enough to do it without your notes. Your references to the notes are made so that you won't overlook any *important steps* or *key points* in training.

When you feel you've gotten the job across, let the learner *try out the performance* (*Step* 3). Let him go through it once. If he makes no errors—fine. Don't interrupt him, just let him concentrate on doing the job. If he does something wrong, however, correct him then and there. The next time have him do the job, and while he does it have him explain each *key point. This point can't be overemphasized.* Unless he can tell you the key points, you can never be sure that he knows the job. It is possible that he may be doing the correct thing even though he is not completely aware that it is correct or that it is important. This technique also forces him to ask questions rather than to attempt to slip by and dope it out later . . . maybe.

Before you put the worker on his own, you should be certain that he knows the job. However, don't just leave him to sink or swim after that. Your training job isn't over yet. *Check him frequently* (*Step* 4). He'll appreciate your interest, and you can correct any errors that may begin to creep into his work. Never allow incorrect methods of work to become established habits. Remember negative transfer. If he has questions, tell him to come to you with them; or if that's not possible, tell him to whom he should go. If you neglect to do this, he'll probably ask the worker next to him, and it's quite possible that that person won't know the answer. Time is wasted, and a worker's production is needlessly interrupted.

Notice the JIT motto. *If the worker hasn't learned, the instructor hasn't taught.* This is undoubtedly true in 90 per cent of the cases of workers who appear stupid or slow in learning jobs for

which they were selected by the employment department. We're too used to blaming the learner for not catching on. In most cases he blames himself, even though instruction may have been notably bad. Let's look at it this way for a moment. Your job is training a man. You're trying to form him into a certain pattern or shape, just as you might shape a piece of steel. If he doesn't turn out to meet the standards you've set, isn't it plausible for you first to examine the way you did *your* job? Just where were *you* wrong? A poor workman always blames his tools—and/or his materials. Are you the poor workman who first blames the human materials with which he works, or do you look to see just where you hit or where you missed the mark? The motto could be put in these less spectacular terms, but terms that would convey its intent: *If the worker hasn't learned, examine first your method of training him.* Do this before you blame him for incompetence.

PLANNING YOUR OWN TRAINING PROGRAM FOR BEST RESULTS

In setting up your own program of training, there are several questions which must be answered. Get the right answers; follow them, and you can start counting the hours and days saved in training right now.

Accuracy versus Speed

You are training a man to do a production job. You want him to come up to standard speed as quickly as possible. You also want his work to be perfect. Speed without accuracy is not enough. On the other hand, perfect work on the great majority of production jobs is insufficient if the rate of production is too slow. How can we solve the problem? If you emphasize accuracy in training to do the job, it is quite possible that the inexperienced worker may develop bad habits early in training. Take the case

of Phil Starr mentioned above. When he tried to do the drill-press operation, one of his mistakes was to align each piece before he drilled it. He hadn't noticed that the experienced operators did not perform this extra step. Being inexperienced, however, he probably could do a more accurate job of drilling if he aligned the pieces first. But in so doing, he was building up a work habit that would later prevent him from doing the job as fast as other experienced operators. Furthermore, his work would then be drilled no more accurately than theirs.

Let's analyze this process. There are probably several methods by which the worker can increase speed at the expense of accuracy. There are also a number of methods by which accurate work may be turned out if speed is considered unimportant. But there is probably only one method by which accurate work may be turned out at high speeds. If the job has been properly engineered, that should be the method in use. That is the method you wish to teach. Now for some rules.

1. *If the job is performed in the same way at both high and low speeds—emphasize speed.* This is usually the case with very simple tasks. In fact, one German industrial psychologist discovered by actual test that emphasis on accuracy in jobs of this sort reduced speed and did not increase efficiency at all.

2. *If the job is done differently at high speeds than it is at low speeds—emphasize correct methods of work.* F. B. Gilbreth, a great pioneer in industrial engineering, demonstrated that the job of bricklaying was done in three different ways. The bricklayer used one method when he worked at high speeds, another when he worked slowly, and still another when he was demonstrating how to lay bricks. How would you like to learn a job on which the method shown you in training was different from the method actually used in work? It would be difficult, and it would represent inefficient training. Therefore, on fairly complicated jobs, where there is likely to be a difference in work methods at differ-

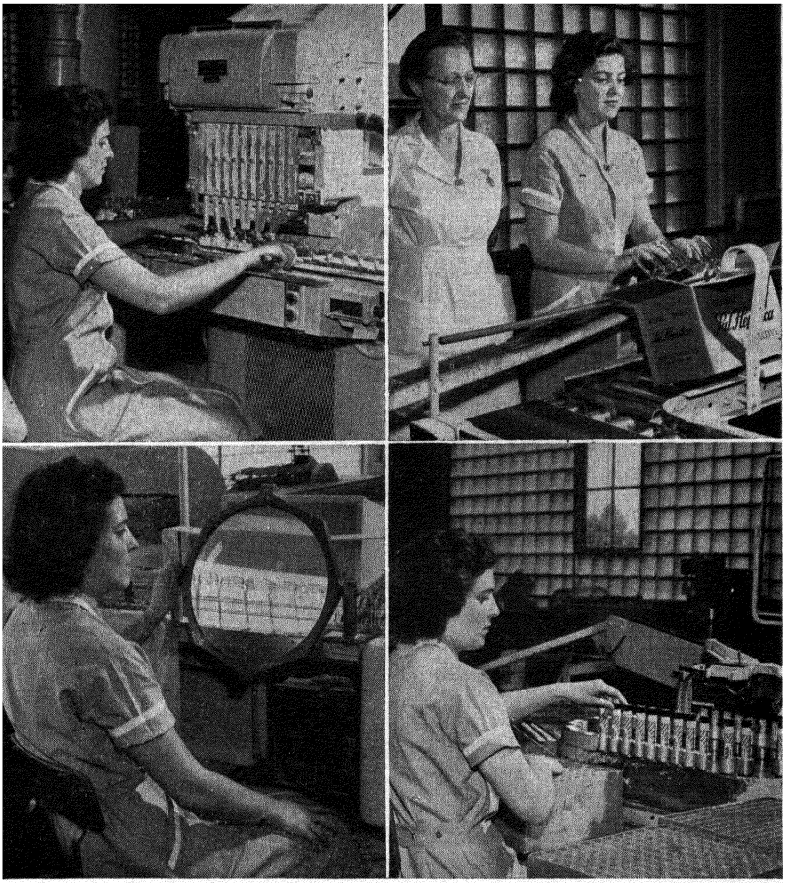
ent speeds, stress the correct method. A number of years ago this point was demonstrated in the teaching of typing. Two groups of young people were taught to type. In one group, speed was emphasized; in the other, accuracy. Eventually both groups attained essentially the same speed, but the "accuracy" group used the more efficient methods. In another study, it was shown that the "accuracy" group in the end actually surpassed the typing rate of the "speed" group and made fewer typing errors.

Perhaps you may have recognized by now that basically the two rules mentioned above are simply more explicit statements of this fundamental principle of training that we have already discussed. "The worker must be taught and must learn only correct methods of work." If by stressing either accuracy or speed you violate this principle, then you may rest assured that your training method is wrong. If you are in doubt about which of the two rules to apply, you will probably not be in serious error if you first emphasize correct work method and then introduce the emphasis on speed as soon thereafter as it appears feasible.

Teach the Whole Job or Break It into Parts?

The only way this question can be answered is by defining just what you mean by the whole job and what you consider to be parts of the job. If by "whole job" you mean the job of a journeyman plumber, painter, or upholsterer, the answer is one thing. On the other hand, if the whole job is cutting threads in a pipe or using a blow torch in removing old paint or tying springs, the answer is something else. The training of the all-round mechanic must be done by teaching him a variety of separate jobs. Here the sequence in which the jobs are presented is of the greatest importance. This will be discussed in detail below.

In the training on the separate jobs, is there anything to be gained by breaking the job down into each of its elemental parts, and then training the individual in each of these parts separately?



Training is the keynote of production efficiency at Bristol-Myers Company. Girls like Betty Kelly, at the Hillside, N. J., plant, are trained to handle as many as 175 assembly-line jobs. Such multiskill training cuts down turnover and eliminates scheduling difficulties and slowdowns from absenteeism. It also makes it easier to train employees, arrange work schedules, and set up wage-rate standards. Aside from the important fact of working at 98 per cent efficiency, for Betty there is relief from assembly-line fatigue and boredom. Job rotation, coordinated with wage administration and training plans and embracing both financial and nonfinancial incentives, makes the Bristol-Myers program produce multiple benefits as well as multiple skills. (*Modern Industry,* Vol. 18, No. 2, p. 62, Aug. 15, 1949.)

For example, suppose that an assembly job called for work to be done by both hands simultaneously. Suppose, also, that most new workers complained particularly about the difficulty in using the left hand. Would it pay off to give these people special training in the use of the left hand; then to give them training in the part of the job requiring the right hand; and finally have them use both hands together? Laboratory investigation has shown this method to be inefficient. It is one thing to have the left hand work alone, and a completely different thing to have the left hand work with the right hand, even though the left hand goes through what appears to be the same set of motions in both cases. You can demonstrate this point to yourself right now as you sit reading this book. Pat your head with your right hand—perfectly easy. Now practice rubbing your chest with your left hand using a circular motion—no trouble here. Now do both together. Impossible! Or almost so, until your practice doing both together. Do you think it would help any to spend a lot of time practicing patting with your right hand and then practicing rubbing with your left? No, you've got to practice with both hands together.

Motions cannot be isolated from the sequence of motions in which they are imbedded. Therefore, jobs should be organized into meaningful whole tasks and taught as such. However, when some particularly difficult part of the task is found, it may be given special training, but that training should always be conducted with the learner recognizing fully just where it fits into the entire task.

How Long Should the Practice Period Be?

How long the practice period should be is a difficult question to answer in other than general terms. It may be rephrased to ask, "How shall we distribute the practice periods?" Shall the worker practice only one hour a day or eight hours a day? If the job is

learned quickly, the matter of distribution of practice is not important. On the other hand, if it involves the building up of a special skill such as typing or telegraphy, it assumes greater importance.

From the psychological laboratories we learn that the most economical way to memorize is to have relatively short practice periods spread out over a long period of time. In other words, it would undoubtedly take more repetitions to memorize a poem if you attempted to memorize it in one sitting (massed practice) than if you repeated it three times each day until you could say it by heart (spaced practice). Similarly, in athletics, training cannot be rushed simply by massing the training. It would be far more effective to practice golf for one hour a day for eight days than to spend eight hours in one day.

We are not particularly concerned here with why the spacing of practice trials proves to be more effective than massing them. Rather, our concern is with the ways in which use can be made of this fact. Obviously, in many jobs it is impossible to let a man practice only a few hours each day. What is he to do with the remainder of his time? Spaced training can be used to advantage only when there are other duties that the worker can perform when he is not practicing. Montgomery-Ward in Chicago undertook the training of girls as secretaries. The course was mapped out so that only a portion of each day was spent in practicing typing and shorthand. The rest of their time was spent in doing routine office jobs that required little training. This was a far more effective system than requiring the girls to spend eight hours a day learning to do typing or shorthand.

The possibility remains that shifting from the practice of one type of work to another job may cause increased difficulty in learning. Fortunately, this does not seem to be the general rule in industry. We would not expect difficulty with such shifts, provided the worker were not required to learn two similar jobs at the

same time. In general, best practice indicates that only one job be taught at a time.

In What Order Should a Beginner Be Taught New Jobs?

There are two orders in which new workers can be taught the necessary skills and jobs of their trade. One is the production order; the other is the order which will allow them to learn most efficiently. By production order we mean the order in which new material is processed to make the finished product. For example, the production order of jobs in the making of *optical glass reticles* is as follows:

Operation
1. Grind to thickness
2. Grind to diameter (finished)
3. Grind bevel
4. Inspect before polishing
5. Block
6. Fine grind
7. Polish
8. Remove and clean
9. Inspect
10. Etch
11. Fill in etched lines
12. Inspect

One might assume that this is the order in which a new worker should be taught the making of reticles. However, M. J. Kane, a training consultant for the government, in a wartime study of training in lens grinding, reports that a somewhat different order proved to be most efficient for training.[6]

Figure 4 shows the training order used in the development of skilled men in this process. A study of the diagram shows that the training order has good reasoning behind it. The over-all purpose

[6] "Training Within Industry Report," *op. cit.*

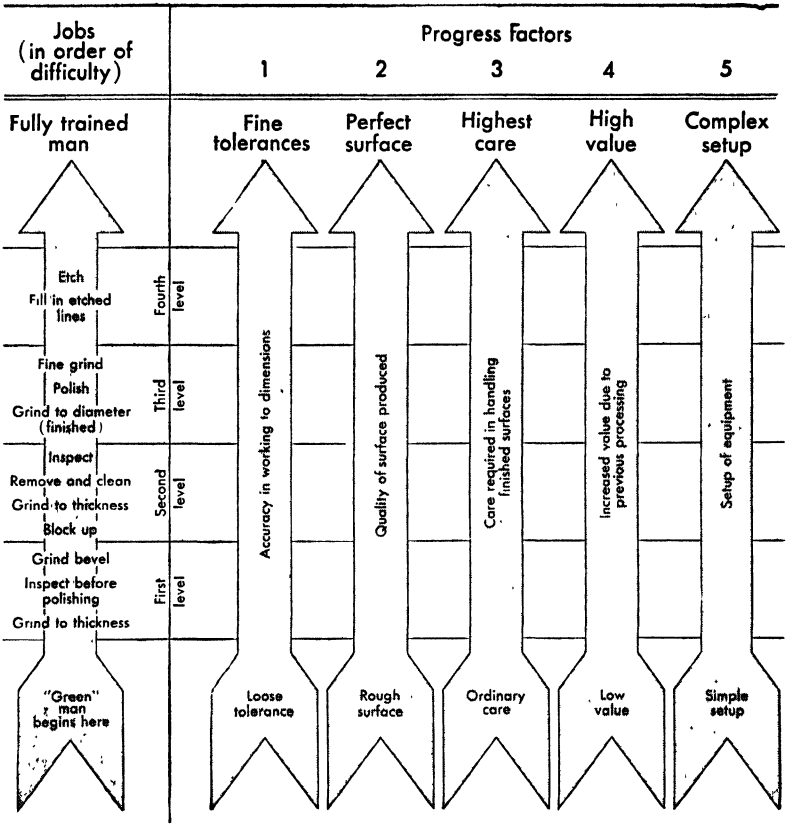


FIG. 4. Sample training sequence of jobs for making optical glass reticles. The "green" man starts on first-level jobs and is assigned successively to second-, third-, and, finally, to fourth-level jobs until he has learned all the jobs in the order listed. He emerges a fully trained man. Training order of jobs is determined by *progress factors*. First-level jobs require less accuracy (1), less perfect surfaces (2), less care in handling (3), have less work time invested in them (4), and are easier to set up than higher level jobs (5). (Training Sequence, "Training Within Industry Report, 1940–45," Exhibit C–1, War Manpower Commission Bureau of Training, U. S. Government Printing Office, Washington, D. C., 1945.)

of the training order is to have each training assignment contribute to the development of skill or knowledge on some fundamental aspect of the whole process. In this particular process, five fundamental progress factors were assumed. These were:

1. Accuracy in working to dimension
2. Quality of surface produced
3. Care required in handling finished surfaces
4. Increased value due to precision processing
5. Setup of equipment

The green man begins training on those jobs which require the least accuracy and care—jobs in which the simplest setups are used, in which the least quality of workmanship is required, and in which the cost of materials is least. As he receives practice and learns more, he goes on to second-level jobs, then to third-level jobs, and finally to fourth-level jobs.

You will note that order of training differs from production order. The job "grind to thickness" is first in both sequences. However, in the production sequence, the second job is "grind to diameter (finished)," but it is the eighth job taught.

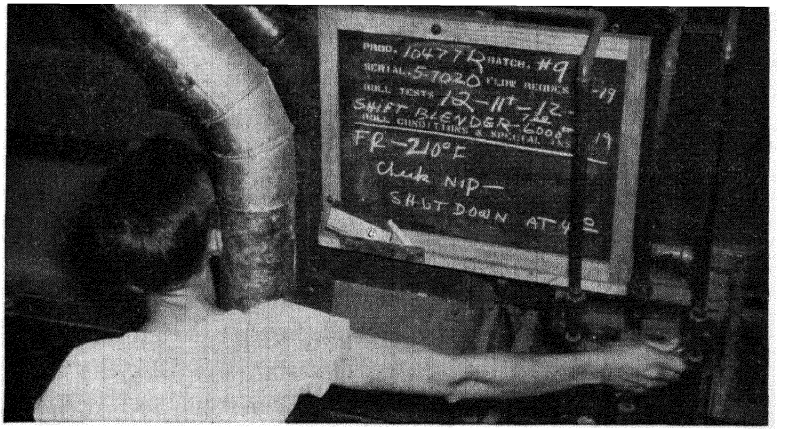
There is no way you can know beforehand just which training sequence will prove to be the best, but the best sequence *can* be determined if you are willing to experiment. The first step is to figure out the factors which are important to success in each job. They may be certain skills, such as working within close tolerances. They may be responsibility factors, that is, responsibility for equipment, materials, or safety. Speed factors might also be important. There are, of course, many others.

Once the basic factors are determined, the jobs are then compared in terms of the importance of each factor. Jobs which require relatively little of the various factors are those which should be taught early in the training program. These are the

foundations upon which the learning of the more complicated jobs are built.

The first training sequence you develop is not necessarily the best. Try others until results show that you have the best possible order of jobs for training purposes. In order to know this, it is, of course, necessary to keep accurate records of progress in training. The records made by various groups of trainees who followed different sequences of training are compared. If the groups were originally equal in ability and were reasonably large in number, then the group which is best in reaching any of the objectives you have set for it in training should be the group following the best training sequence.

To determine accurately the best training sequence or, for that matter, the best over-all training procedure is more difficult than appears from the foregoing discussion. It is not our purpose to go into great detail in warning you of the errors you may make in



Knowledge of results helps both training and production. At Monsanto Chemical Company's plastics division, Springfield, Mass., inspector posts test data on strategically placed blackboard. Worker sees results as soon as tests are completed. Then he knows exactly where he stands. (*Modern Industry*, Vol. 19, No. 2, p. 48, Feb. 15, 1950.)

experimenting on training methods. Rather, it seems more important to emphasize to the supervisor or foreman that training methods can be improved. They should not be accepted just because they have been used in the past. Experiment with them. Try new things. Don't be satisfied with your own training techniques until you become convinced of their superiority by actual trial and error with other methods.

Does Practice Make Perfect?

It depends upon what you practice. This old saw has been used too often as an excuse for neglecting training: "Don't bother telling or showing a man the new job; he'll pick it up with enough practice." The unfortunate thing is that he will probably pick up wrong ways of doing the job. In almost every job in which no instruction is given in correct work methods, workers adopt and practice a variety of methods.

Viteles tells us about specklers in a textile manufacturing concern.[7] Specklers remove loose threads, burls, and such things from bolts of cloth. It is one of the finishing processes in textile manufacturing. These operators had not been trained carefully in the beginning. The job was simple and could be easily learned. However, when the work methods were studied, it was discovered that different specklers used different methods. Furthermore, they found out that one of the methods was vastly superior to any of the others. All the fastest workers used this method. All these workers had had just about the same amount of practice, but they did not all practice the same method. Nor would any additional amount of practice have made workers who were using the wrong method as speedy as those who used the best method. It should be clear, then, that practice will make perfect only if the correct methods of work are practiced.

[7] M. S. Viteles, "The Science of Work," W. W. Norton & Company, New York, 1934.

Relations with Training Department

A final word in this chapter should concern the supervisor's relationship to the training department. Training is a part of production, and it must be recognized as such. Effective training departments function by improving and aiding the *training done in production departments by production men.* In companies which have training departments, it is false for the supervisor to assume that this department carry on the entire training function. It is equally wrong for the supervisor to take the attitude that the training department is simply an intruder. Both must work together for better in-plant human relationships and for a betterment of production.

Questions and Discussion

1. How would knowledge of the learning curve for a job benefit the supervisor? The learner?
2. Why should we guard against negative transfer in the learning process?
3. What can be done to ensure the greatest amount of positive transfer in the learning of a new job?
4. Prepare a job breakdown, similar to the one in Table 1, on a job with which you are familiar.
5. Do you agree completely with the JIT motto, "If the worker hasn't learned, the instructor hasn't taught"? Are there exceptions?
6. How would you determine whether to stress accuracy or speed in the training on a particular job?
7. Prepare a training-sequence chart, similar to Fig. 4, for a series of jobs with which you are familiar.
8. Distinguish between steps and key points.

NINE

Tools for the Supervisor's Kit

In this chapter we shall consider some of the more important relationships and reactions between employees and the supervisor. Why is it that workers respond willingly to one order and bitterly resist another? How do their attitudes and past experience control what the employees do when the boss corrects a mistake or enforces rules through discipline? There must be some reasons for enthusiastic compliance in one situation and balky resentment in another.

ALL BEHAVIOR HAS A CAUSE

We know that there is a cause behind every human act; there is a definite reason for each thing a person does. This is an established principle of psychology. To be sure, the real cause is often hard to find; nevertheless, there always is one. Human acts don't just occur; they are not accidents. Neither do they just happen suddenly because of some mysterious *will* within the individual. The true cause of behavior must be sought in the immediate surroundings and forces of the situation and in the past conditioning and experiences of the individuals concerned. Recognizing that there is such a *cause* behind each act is the first basic step in

understanding human behavior. It is also a fundamental principle for intelligent supervision.

FIND THE CAUSE

When the supervisor really knows the worker and when he explores and analyzes each situation and reaction, he is on the way to understanding the cause responsible for the reaction or behavior. He is then in a better position to know what will happen when an order is given and to understand the reason for what may appear to be insubordination or just plain orneriness. He is better able to predict behavior and to know what results to expect. Here is a difficult challenge for any supervisor: *Find the real cause.* Frequently, the major cause for the employee's behavior may lie in something the supervisor has said or done, or in the way he did it. When that is true, it would be rank injustice to blame the worker for his actions. Blaming the man for the results of his behavior is not the right way to correct the situation or to improve his future behavior. No, the supervisor must determine the real cause and remove or correct it. If he understands and practices this principle, it should have a vital effect on the way he supervises.

Let us consider this principle of behavior in regard to reprimanding an employee for his mistakes. What is accomplished when the supervisor blows his top and harshly reprimands the employee who repeatedly makes the same error? The supervisor is blaming the worker for the *result* of his behavior instead of attempting to discover the actual *cause.* Nothing much can be accomplished by scolding or preaching about the results unless this somehow affects the cause of behavior. If a supervisor's order was given incorrectly, it should be rephrased in terms that are clear. Or if the worker misinterprets the order because it conflicts with some earlier experience, he must be retrained so that he

interprets it correctly. Let's take an example from the shop. When a motor breaks down and fails to perform properly, what does the mechanic do? Does he kick the motor? Does he curse it? Does he throw it in the junk pile? No. Such actions would be childish and absurd, and they would never fix the motor. The mechanic takes his kit of tools and tries to determine the cause of the breakdown. It may be a broken part. Something may need adjusting. Perhaps the motor needs oil, or maybe the fuel fed to it is of poor quality. The mechanic looks for the cause. When he finds it, he corrects it and the motor runs again. Or take another example. What happens when you are ill and you call in a physician? Does he stand by your bedside and berate you for your illness? Does he preach to you about how wrong it is for you to be ill? No, the doctor counts your pulse rate, takes your temperature, or he measures your blood pressure. He is studying your symptoms, which lead him to the *cause* of your illness. Once he has determined the cause he writes a prescription or recommends treatment to overcome it.

In supervising men, when they make mistakes or seem to be insubordinate, we should follow the same plan: *Find the real cause.* We should remember that in all probability the worker could not have done otherwise under the particular circumstances. It will do little good to reprimand him for the results. Sometimes the reprimand does cause enough unpleasantness to make him try to avoid repeating the offense. But the best way to change his behavior is to eliminate or change the cause, which may mean retraining the worker.

Find the cause; try to get him to understand it. Blaming and finding fault create resentment, which brings even more difficulty. Take time to find the cause, and counsel with the man. Then he understands what he should do, and he does it correctly next time without resentment.

Do We Know the Cause of Our Own Behavior?

When we ask a man why he did something, he usually gives what he believes to be a reason. He thinks he knows the cause of his action, but often he doesn't really know. He confuses the result of his action, or what he calls his "purpose," with the actual cause. Many of the real reasons for behavior lie deeply rooted in the youth and early experiences of a person. Attitudes, personality traits, and habits have developed over the years to make him what he is. He is unaware of the parts they play. Ask a man why he hates or fears snakes. Unless he has actually been bitten by a poisonous snake, he rarely has any idea of why he is afraid of them. Actually, somebody taught him to be afraid of them in his early youth. He has long since forgotten who did so, but the effect remains and he fears snakes. The same thing happens often in many of his actions. The worker gives what he thinks are reasons for his behavior, but the actual cause sometimes is found to be some obscure warp of his personality which began in his childhood.

This tendency to give reasons other than the true or basic reasons is known to the psychologist as "rationalization." Rationalizations need not be deliberate avoidance of the facts. Usually they are not. They are rather excuses given to protect the ego of the individual, not only from the criticism of others, but also, more important, from his own self-criticism.

Ruch [1] tells of a physician who discredits the use of vaccine in the treatment of disease and refuses to use it in spite of best medical opinion and practice. He gives what he considers to be sound scientific arguments against its use. Hidden from all, including himself, is the real reason. As a young physician he was

[1] F. L. Ruch, "Psychology and Life," 3d ed., p. 492, Scott, Foresman & Company, Chicago, 1948.

a ship's doctor on a large passenger vessel. While at sea, an epidemic broke out among children on board. The young doctor administered the vaccine to the infected children. However, fearing exposure to the disease, secretly he used the last injection for himself. Several of the untreated children died. Though he will not admit it to himself, his present refusal to recognize the value of vaccine serves as a complicated rationalization for his unethical behavior while a ship's doctor.

The Drakes,[2] in their interesting work, give two illustrations of this all-too-common mechanism of behavior.

Mr. C. was known as one of the best foremen in the plant; he was efficient, methodical, and even ingenious in the design of methods and equipment. As part of a methods project, industrial engineers discovered that improvements could be made on several dozen machines designed to turn out small parts. Mr. C. resisted their suggestions and gave many reasons why the changes were unfeasible, such as costs, down time, limited further use of the machine, etc. The engineers gave up the change as unsalable but still desirable. Only later did they discover the real reason for Mr. C.'s resistance. He was the one who had designed the machines in the first place. Mr. C. was unconsciously placing his own pride before an action that would benefit both the employees and the company.

Mr. B., an office manager, had the desks of his staff arranged so that he could see every employee from his glassed-in office. He took great pride in the apparent industriousness of his people. Those who spent too much time away from their desks, took too many trips to the water cooler, or who refused to keep up the appearance of hard work were called on the carpet, or were fired if they failed to mend their ways. So the employees put on an act for Mr. B., but were actually no more industrious than those who

[2] C. A. DRAKE and S. DRAKE, "A Human Relations Case Book," pp. 154–161, McGraw-Hill Book Company, Inc., New York, 1947.

worked in more congenial offices. Mr. B.'s expressed motives for his action were wholly acceptable: more production and less waste of time. Mr. B.'s actual motives were based on his own personal insecurity and feelings of inadequacy. He was not sure enough of the quantity and quality of work that should be produced by his unit, so he could not let his department stand on its record alone. What he needed to make him feel that his job was being done well was the spurious appearance of industry on the part of his staff. Yet he was unaware of this reason, although his superiors were beginning to suspect the truth.

So we must recognize that the reasons, excuses, rationalizations that men give for their actions are designed to conceal rather than reveal. The wise supervisor looks beneath the surface and investigates conditions thoroughly before he accepts stated reasons. Nor will he neglect viewing his own behavior in this light.

MAKING YOUR ORDERS ACCEPTABLE

Before we consider the process of giving orders, it may be well to think for a moment of the willingness of people generally to take and obey orders. Here we meet two very common human tendencies which are of the utmost importance in supervision. The first we might call *the desire to follow*; the second, *the desire for freedom of action,* or independence.

All actions of the supervisor, including orders, must run the gantlet of the two tendencies. The *desire to follow* greatly improves the reception of a properly phrased order. But an order which doesn't take fully into consideration the feelings of the receiver collides with his *desire for freedom of action.*

The desire to follow a leader seems to be common to almost all men. Regardless of how brilliant or talented a person may be, he wants to look up to someone for direction. He looks for guidance from people he feels are qualified. He wants to give prestige to a real leader. But, as we shall see in the last chapter of this book,

there is a great difference between true leadership and authority. The authority often uses driver's tactics to enforce his orders through fear and threats. But the leader is followed because the workers respect him and have confidence in him. The supervisor who has earned a position of true leadership in his group has little trouble in getting his workers to follow his orders willingly. He is cashing in on the common *desire of men to follow a leader.*

On the other hand, the supervisor who uses driver's tactics clashes immediately with the other human tendency, the *desire for freedom of action.* Most of his orders are commands in which little consideration has been given for the feelings of the worker receiving them. His manner of speaking says, "You do as I say and don't question it."

Commands which are barked out without thought of the feelings for the employee are frustrating and result in resentment, conflict, and resistance. It seems to be natural for most people to resist change. Now, an order is usually a request for a change in behavior of some kind. It follows that in giving orders the supervisor must be doubly careful to phrase and give them in such a manner that they will not run afoul of the *desire for freedom of action* in the worker.

How to Phrase Your Orders

In giving an order, we are making a request for certain behavior on the part of the employee. The behavior of the worker who receives the order will depend on how he interprets and understands it, and on his readiness or capacity to follow it. This in turn depends partly on his condition at the moment the order is given. In other words, the forces of his personality may be involved in his *readiness to act* so that he can follow the order.

Suppose that the supervisor giving the order can speak French and that the worker receiving it cannot understand French. It would be useless in this situation for the supervisor to issue his

order in French. Certainly, he could not expect understanding or obedience. It is equally useless to give any order in words or a manner which the worker can't understand. Not only must the level of the worker's intelligence be considered, but also the supervisor must think of the worker's other personality traits to know just how to phrase the order properly for him as an individual.

Negative Orders

One of the most common mistakes made in issuing orders is phrasing them negatively. We tell a man *what not to do* and pepper our directions with "don'ts" and "nots." It is nearly always much more difficult to understand a negative statement or order than one which is positively phrased. When we tell a man what not to do, we are making it harder for him to comprehend.

"Nick, don't put the babbit metal in with the brass filings," ordered his foreman. Here is a typical negative order. And what happened? Twenty minutes later, when the foreman returned, there was Nick carefully putting the babbit scrap in with the brass filings. He wasn't doing it partly wrong; he was going whole hog, doing just the opposite from what his foreman ordered. This wasn't new for Nick; he had done this before. This time the foreman blew his top and reprimanded Nick, but Nick stolidly stood his ground and insisted that he had been told to put the babbit in with the brass filings. He was offended at the reprimand. Mumbling sullenly about bosses who can't make up their minds, he grudgingly put the babbit in the other box.

Here is an example of an order improperly phrased for the individual receiving it. Like most people, Nick had trouble understanding the negative order. He remembered the action the order called for all right, but his memory played a trick on him. He simply forgot the word "don't." Obviously, when we leave out a "don't" or a "not" we reverse the meaning of an order. Misinter-

preting a negative order in this way brings about behavior completely opposite to that expected. No wonder that Nick argued with his foreman and resented his reprimand. Whatever blame there is in this incident goes to the foreman. Since he didn't phrase the order properly, it was misinterpreted and the order was not followed. The reprimand brought only resentment and a wider gulf between worker and supervisor. Then, too, this negative order, without reasons behind it, didn't take Nick's feelings into account. It was a command of the kind given by drivers. In effect, it said, "It's none of your business why I want you to do this. Just do what I say. You have no right to question. You aren't paid to think; you're nobody here; you're just a hand." This command clashes with Nick's *desire for freedom of action.* It treats Nick as if he were a slave or an unfeeling thing. Perhaps this one incident wasn't much in itself, but multiply it by scores of others and we get a common result: Nick hates bosses.

Positive Orders

"Nick, this babbit metal is hard to get now, so we're going to melt it down. Please put it in this box over here unless you have a better suggestion." Here we have the same order. The foreman is asking for the same thing but with what a difference! First, he has made a positive request. "Please put it in this box over here." There are no "don'ts" or "nots." It is a direct, simple, and easily understood order. And Nick understands it this time. Sometimes the supervisor forgets that he has had ample time to consider the order but that the worker hasn't. It is clear to him because he's been thinking it over. But he springs it on the worker in a few seconds and doesn't allow time for it to sink in.

Give a Reason for Your Order

This positive order allows time for Nick to grasp it, but it does more than this. In the positive order the foreman tells Nick *why*

he wants him to do something. He gives his reason. ". . . this babbit metal is hard to get now so we're going to melt it down." What is the effect of this? Nick now understands why this action is desirable. It isn't because the foreman wants it so; it's because certain conditions exist which require the action. It isn't a personal demand. Instead, it is something that should be done because of outside conditions beyond the control of either the foreman or the worker. Circumstances dictated this order. It is impersonal, but the conditions are shared alike by both the foreman and the worker. By giving the reason for asking Nick to do something, the foreman has implied something like this: "Nick, you're an intelligent person, so you have a right to know what is behind this order. I'm not blindly demanding this from you. I'm telling you, as I understand them, the conditions that make this action necessary. I'm sharing responsibility with you." What a difference these implications make on Nick's attitude. He now has another peg on which to hang the order. He knows the reason for it, and now it is easier to understand.

Orders Can Promote Participation and Morale

Look now at the last part of the order: ". . . unless you have a better suggestion." What is the effect of this statement on Nick's feelings? It says something like this to him: "I appreciate your suggestions; your ideas are valuable. You know what you're doing. Your ideas may be better than mine. Express yourself." Here the foreman has phrased his order so that it is acceptable. He has used Nick's natural *desire to follow*. He has built a little closer relationship between management and the worker. He has encouraged him to participate. No doubt it also resulted in greater confidence on Nick's part, so that the next time the foreman gives him an order there is less likelihood of resentment. Nick has been considered as an individual.

This positive order may have required thirty seconds longer to

give, but if Nick followed the order, the supervisor obtained the result he wanted. So it was thirty seconds well spent in good management. If, in addition, the order served as a training device, in that it explained the *why* of the action to Nick, it then achieved a better informed employee. Beyond all this, when the order creates better harmony between the supervisor and worker, it is a step toward better attitudes and toward improved morale. Few supervisors would knowingly insult their subordinates. Yet many do so unconsciously by giving harsh commands or by treating workers without sufficient respect. Little by little, such inconsiderate treatment leads to resentment and hostility. A little time and thought in planning and phrasing orders builds confidence and cooperation.

COMMON ERRORS IN GIVING ORDERS

When the supervisor phrases his order clearly in language which the worker understands, and when he gives the reason for the order, he usually gains cooperation from the worker. There are, however, several common errors to which we should give some attention.

Too Many at Once

Giving too many orders at one time is one common mistake. It is usually better to give one order at a time and to make certain it is understood before giving others, even though they may be related to the first one. It's a good practice to give an order and then to ask the employee to explain to you what he is to do. This may be followed by a demonstration to show him how to do it. When this is mastered, other orders related to it may be given, and the same procedure is followed for each of them. This step-by-step procedure ensures an understanding of each separate order and also serves to develop the proper sequence of operations. Once the worker has gone through the entire process and put all

steps together in the proper order, speed and rhythm follow with practice. (More detail on this subject is given in Chap. 8.) Giving orders is very closely related to training procedures, and most orders quite properly should be considered as opportunities for employee training.

Too Much Detail

Another common difficulty arises when orders are given in too much detail. Orders which are spelled out too completely seem childish to an intelligent worker. Knowing the mental capacities of the worker who receives the order is the answer to this. Employees like to use their own judgment and intelligence. Frequently it is necessary only to give the purposes and a broad outline of the method desired, permitting the employee to fill in the gaps and details himself. This gives him a feeling of participation. It develops his initiative and doesn't run contrary to his *desire for freedom of action.*

But taking too much for granted can also result in failure to follow an order. Here the supervisor overestimates the capacity of the employee or fails to give him sufficient explanation and reasons for the order. The worker is in the dark and must proceed by trial and error. Asking questions to make sure the employee understands a complicated order usually brings understanding.

Ask—Don't Command

One final word of counsel for procedure with all orders. Whenever possible, give your order as a suggestion, not as a command. Suggestions can be phrased in many ways. For example, "How about helping with this?" "We need to get this job out of the way to meet the schedule. Do you think we could do this?" Some able supervisors actually start the job themselves, then turn it over to the worker. This serves to demonstrate the method and shows that the supervisor is not above doing it himself. An order phrased as

a suggestion is not a weak order. It carries just as much authority as a command, but there is a great difference in the way it is received. A suggestion doesn't antagonize. The employee feels that he is treated as an individual and with proper respect. He is not commanded or driven as a slave. It is another way of cashing in on the *desire to follow*. On the other hand, commands are the method of the driver. They show little courtesy or respect for the worker as an individual. By setting himself apart as an authority, the supervisor creates a gulf between himself and the worker. The driver's attitude may be summed up as "I tell 'em what to do, and if they can't do it, let them take the consequences." Such a supervisor is really displaying his own weakness. He is insecure. He is afraid that his men will disobey him, so he issues his commands in a loud voice and struts his authority. But the real leader knows that he must be one of the group himself. He is working with his men; they aren't working for him. He doesn't speak of "my problem" but rather of "our problem." He makes frequent use of the word *we* when he gives his orders. Real leaders have discovered that the less authority they show, the more they actually have. Use your authority sparingly. Always put yourself in the other fellow's place before you give him an order.

HOW TO CORRECT EMPLOYEES

Correcting employees is part of the training job of the supervisor and is one of his everyday duties. There is no *one* right way to make corrections; there are many wrong ways. Certain general guides are useful in changing behavior to get the employee to accept recommendations without resentment. Here are some of the more important steps which supervisors should follow.

1. *Consider the personality and attitudes of your man* before you correct him. Watch for signs of frustration. Wait a while if he's upset.

2. *Be sure that your own attitude is one of genuine helpfulness.* If you are criticizing only to show your authority, you will make few improvements. Instead, you will build up personal resentment against yourself. Never correct in anger. Always allow yourself time to calm down and think coolly.
3. *Get all the facts first.* If possible, find the cause of the behavior or error before you talk with the man. Many a supervisor has been seriously embarrassed and has lost the respect of his men because he reprimanded them before he was sure of his facts. Errors are often due to factors beyond the control of the employee. Blaming a worker under such circumstances means loss of prestige for the supervisor. He gets a reputation for being unfair. In getting the facts, don't make snap judgments. Give the employee a fair hearing and let him tell his side of the story fully. Be a good listener; don't interrupt the man unless you need to clarify some point he makes. Careful attention to his story may bring out important points that you might otherwise overlook. Investigate possible causes outside the shop. Often an employee is not himself because of illness in the home or because of some other anxiety. In some cases he needs help, and he will usually show his appreciation by greater loyalty if the help is given without criticism. After hearing his story, check the facts and consult records without embarrassing the employee.
4. *Share the responsibility for an error.* Nearly all leaders have learned the value of letting people save face, when they point out errors and make corrections. They don't insist that a man admit his mistakes. Rather, they shoulder part of the blame. Advice is given in a friendly manner. The leader says, "Bill, maybe I didn't make it clear that you are supposed to do it this way." Or, "I've learned a better way to do this; let's give it a try."

5. *Don't belittle the worker.* Personal abuse offends him so that he won't listen to your suggestions with an open mind. Such criticism is apt to frustrate him.
6. *Be tactful without emotion.* Show patience and good will. Never use sarcasm or ridicule. Men respond much better if they believe that the supervisor has faith in them and thinks that they have the ability and intelligence to do a job correctly. Don't blame the employee. Seek with him the cause of the error. Be sure he understands the *cause of the trouble,* and show him the way to eliminate it and to substitute the right action. Explain how and why the work must be done. Treat him as an adult, and appeal to his intelligence by pointing out why the change must be made.
7. *Criticize constructively.* Point out how improvement can be accomplished. Praise him for what has been done right, and build in him a desire to do better by showing the advantages to him of using the right methods. Such criticism motivates the worker to cooperate because he *wants to,* not because he is *afraid not to do so.*

WHEN AND HOW TO PRAISE

Success in supervising people depends partly on an understanding of how each individual regards himself. We must recognize that everyone is self-centered. This might be called the "ego drive," or a man's pride in being himself—his self-respect. Here is a very definite basic human need, the need of recognition, admiration, and approval from others. Praise and good will from other people are required if this need is to be satisfied. All men will work hard to gain admiration and praise from others. All of us are easily frustrated if our egos are wounded when we are ignored, blamed, or wrongly criticized. It is for this reason that praise is one of the strongest motivating forces at the super-

visor's command. Praise from someone in authority, whom the men respect, is often a stronger force to gain cooperation and increase production than a pay increase. Praise, then, is an ego-satisfying reward. It should be used to commend desirable behavior. It should be used on occasions when the work, or other

Praise from the boss is often a stronger incentive for increased production and cooperation than a raise in pay.

behavior, is better than usual and warrants recognition. Withholding praise is actually a mild sort of punishment. This can have a positive value since the employee always desires recognition and will correct his ways in order to regain the approval of his supervisors. And withholding praise when praise isn't deserved won't arouse resentment.

Some people believe that praising a person makes him conceited and too self-satisfied. This, they think, results in poor work. Moore [3] reports on several scientific investigations which show that this isn't true. Only 1 out of 200 people reacted that way. On the other hand, 87.5 percent improved their work when they were praised for their efforts. Isn't that a good batting average—hits .875, errors .005?

DISCIPLINE

Whatever satisfies our needs is pleasant. We call this a "positive incentive." This incentive has a strong, positive influence because the result is a reward and brings satisfaction. The opposite effect, resentment, often results from a negative incentive such as punishment. Negative incentives have unpleasant effects, so we try to avoid them. Supervisors can influence behavior by both kinds of incentives: by positive incentives that bring satisfaction through rewards, such as praise, recognition, promotion, a raise in pay, etc.; or through negative incentives that usually result in resentment, such as reprimands, threats, and punishment. For example, we may influence a man's behavior by praising him for his performance of a job, or we may threaten him if he doesn't do it in a certain way. The reward method results in satisfaction and makes the employee want to cooperate.

The threat of punishment, on the other hand, builds up resentment or fear which slow down the employee. It may even make him incapable of doing the job. Drivers always use threats and fear; they try to force the worker. Such *rule by fear* is an attempt to push the worker into certain behavior. This may frustrate him. Then he seeks ways to avoid being pushed about. So he may appear to work hard while the supervisor is around, but while the supervisor is away, the employee loafs, spoils work, or

[3] HERBERT MOORE, "Psychology for Business and Industry," 2d ed., p. 272, McGraw-Hill Book Company, Inc., New York, 1942.

wastes materials. Unfortunately, in the past it wasn't unusual for a foreman to punish an employee by using abusive language and threats of discharge; some even used physical violence. This was the method of the old-time dictator who never bothered with human relations. Fears and resentment created by such attempts at discipline arouse negative behavior. Men slow down production and form destructive attitudes toward the supervisor and the company.

Enforcing Rules

Rules are to an organization what laws are to society. They are for the protection of the members and are enforced for the good of all concerned. Usually they are established because people recognize that certain things must, or must not, be done by all members of the group, because the group would suffer by a violation. But such rules must be fair, understood, and accepted by all if they are to be obeyed. Rules may conflict with the individual's desire for freedom of action; and if so, they are not popular. Experience shows that if the employees have participated in setting up the rules of the company, they are much more likely to obey them. When they have had a voice in making the rules, the rules seem more reasonable and the workers are more likely to understand and accept them. Many companies, recognizing this, consult their employees before any new rules are adopted. Some have used management-employee conferences effectively, not only to develop the rules, but also to enforce them. But individuals and groups will not obey rules if they feel they are unreasonable or unfair. Rules which are too rigid or arbitrary invite workers to find a way around them. Under such circumstances, employees will go just as far as they dare within the letter of the rule so as not to be technically guilty of breaking it. Such actions violate the spirit of the rule and accomplish the opposite effect for which the rule was made.

There are exceptions to all rules; this is a long-established truth. Circumstances and exceptional conditions require interpretations and modifications when some rule is beyond the control of the employee and he could not have behaved other than he did in violating the rule. The wisest judges of history have always tempered justice with mercy. In doing so, they have gained greater respect for the law and prestige for themselves.

We sometimes find companies whose practice is to punish any violation of a rule with no variation or modification of the punishment whatsoever. Such a policy reflects the mistaken idea that to be consistent every action must be the same. This implies that the circumstances surrounding all misdeeds are identical and that all persons breaking the rules are alike. This can't be true, for circumstances are always different and no two individuals interpret them in the same way. Allowances should be made in justifiable circumstances. When this is done and coupled with an explanation, there is no loss of respect for the rules nor for the supervisor. If he has been fair in his treatment of the case, even though he hasn't acted exactly as he had before, employees are quick to agree with him when he explains the circumstances. He gains in prestige. He doesn't lose face by such actions. The supervisor who invariably enforces every rule to the last letter is considered arbitrary. He is exercising too much authority, as the workers see him. In general, the fewer the rules, the better. Morale is sometimes defined as the desire of the group to *discipline itself*. If a group has good morale, its members recognize the fairness of the rules and help the supervisor to enforce them by exercising pressure on the wayward employees.

When Is Punishment Justified?

Occasions do arise when reward is definitely not indicated and some form of punishment may seem required. Punishment

is effective when it prevents the repetition of some undesirable act and when it seems related to the misconduct. When a child is not a good sport, it is wiser to take him away from his playmates than to spank him. When we send him to his room, the punishment is related to his antisocial behavior. If the child is spanked, he will probably associate the punishment with the person who spanks him. The result is only resentment of that person. Such punishment not related to the offense ordinarily will not prevent a repetition of his undesirable behavior.

The same thing is true for an uncooperative employee. It's better to take him off the particular job or penalize him by disallowing some privilege than it is to abuse him. Punishment, to be effective, should be related to the incident. The worker must see that justifiable penalties naturally follow as a result of his own misdeeds. Also, the degree of punishment should be in keeping with the gravity of the misdeed. Punishment which is too harsh, especially when given by an angry supervisor, causes rebelliousness in the punished as well as in the other workers. Firing a competent worker should be a last resort, used only when all other methods have failed. All too often, men have been fired when a milder punishment such as a reprimand, layoff, loss of privilege, or a demotion might have salvaged them.

When, then, should we use punishment? Obviously, fairness dictates that violations shall not be completely ignored. The supervisor must call every minor violation to the attention of the erring employee unless the violation was clearly accidental. If the employee broke a rule with which he was not familiar, then the supervisor should inform the worker and point out his mistake; this does not call for a bawling out but rather for training. Discipline must be maintained. Employees do not resent strictness if it is fair. Insubordination and other serious abuses must be dealt with firmly and promptly, or respect for authority will suffer. But the wisest course for the supervisor to follow is

to *get the facts first*; determine the real cause for the act and then apply effective punishment in accordance with the gravity of the situation. But, remember, punishment of itself does not build new constructive behavior. It should be used only when it will cause the worker to avoid repeating the offense. Ordinarily, education and training are more effective tools for better behavior than punishment. While punishment may be easier to administer, its results are limited. Use it with caution in situations when consistency and fairness to others require it.

Reprimands

"Why should I tell a guy he's doing a good job? That's what he's here for. I just let 'em know when their work isn't up to standard." How many supervisors take good work for granted! And how many of these same men reprimand severely when errors are made. Errors, poor production, and spoiled work frustrate the supervisor because they reflect on his department and leadership. Some workers get reprimanded only because the boss is frustrated, and he uses this way of getting it off his chest.

Scientific investigations [4] on the value of reprimands as incentives for better work reveal some important facts for supervisors. According to these investigations, reprimands given in private, with constructive suggestions for improvement offered, can achieve good results. Public reprimands have a very bad effect but are not quite as serious as the use of ridicule and sarcasm. Private and public ridicule, private and public sarcasm, all injure the ego, bring resentment, and result in poor production. Sarcasm has the worst effect. The human ego just can't take it! But public ridicule also builds up so much resentment that in over half of the cases the employees not only fail to improve, they actually increase their errors. With the exception of reprimands given in private, all these forms of discipline build up

[4] *Ibid.*

resentment against the supervisor and result in bad attitudes and lowered morale. Private reprimands, too, unless skillfully handled, can do damage.

MOTIVATING BY COMPETITION

The foreman in Department B had tried by pep talks to increase production, without too much success. Then he showed his men the new record Department A had made. That is all they needed to make them get to work. They had something to beat. They were stimulated by competition. Competition with equals in ability can create a rivalry that results in high achievement.

A supervisor can spur his men on by promoting competition between individuals or between his department and another group. Group competition develops team spirit and fosters good morale, but the members of the groups must be of about equal ability. Competition with men who are far superior brings no satisfaction at all. Rather, it creates frustration. And if some members of the team are noticeably weaker, they will pace the group and slow it down. Work gangs should be balanced, composed of workers of nearly equal ability, endurance, and speed.

The team spirit will wane and the challenge will disappear, though, unless the men know the score as they go along. Keep them informed of their progress. Encourage improvement and praise it.

BASIC PRINCIPLES OF GOOD SUPERVISION

To administer any work program or to manage people effectively there are four basic principles of supervision[5] which must be consistently followed. They are:

[5] See ROBERT D. LOKEN and EARL P. STRONG, "Supervision in Business and Industry," Funk & Wagnalls Company, New York, 1949.

1. Unity of command
2. Span of control
3. Uniformity of assignment
4. Delegation of responsibility with adequate authority

These principles are not mere theories or rule-of-thumb notions. They are fundamental, basic laws for scientific management. They cannot be violated or ignored without causing confusion, inefficiency, and often antagonism in the organization. They should be followed consistently by all members of supervision from the top to the bottom. All too often, executives and supervisors feel that their organization is different and that they can ignore these basic principles. Others start out bravely enough to follow them and then slip up. Before they know it, a department or company is in serious trouble, with inevitable red-tape duplication of effort and a conflict between supervisors and employees. Understanding and practicing these basic principles are vital to all levels of management.

Unity of Command

By unity of command we mean that a person should receive orders from *one and only one supervisor.* Taking orders from two or more supervisors frequently results in conflicting orders and an unfair burden on the employees. When a man reports to more than one boss, he can never be completely certain which one to follow. When supervisors don't agree or when two want something done at the same time, the employee is left holding the bag. If he is reprimanded, he quite properly feels that he has been unfairly treated. Taking orders directly from more than one supervisor nearly always lowers the morale in a department.

Although the importance of this principle is quite generally recognized by management, they often give mere lip service to it. When an employee has been hired and is told to report to a

certain foreman, that foreman is responsible for that employee's work. He, therefore, should issue all orders to him. But what usually happens? Without thinking of the results, the general foreman or superintendent may by-pass the foreman and give an order directly to the employee. Because the foreman isn't right there at the time or because the higher supervisor is in a hurry, he ignores this basic principle of unity of command and tells the employee directly what to do. Inspectors and staff workers are very often guilty of this practice, too. In their eagerness to get things done, they forget that all orders should be issued only through the employee's immediate supervisor. Sometimes they even take the employee from the work to which he has been assigned by the foreman and order him to start on something else. When the foreman returns and finds his employee doing something assigned by someone else, he is quite naturally irritated. Such actions undermine his authority. He is very apt to reprimand the innocent employee when the blame properly belongs to another supervisor or staff man.

When such violations occur, the alert foreman should take immediate action. If he allows this practice to continue, he will find his employees and his department hopelessly bogged down in confusion. Much of his own prestige and authority will be lost. What, then, should he do about it? There are several ways to solve this problem. First, each worker should know definitely the duties of his job. A written job description which defines functions and explains to whom he shall report gives him this information. Second, an up-to-date organization chart which shows the lines of authority and relationships between supervisors and workers can be posted on the bulletin board. Each employee then can identify himself on the chart and see who has the proper authority to issue orders to him. Reference to the chart shows clearly when improper channels of communication and command have been used. Third, subordinates should be instructed to

accept orders from no one except their own immediate supervisor. They should be told that if anyone else attempts to direct them they should refer that person to their own supervisor. Naturally, this requires tact and caution on the part of the employee if a higher supervisor violates the rule. But nearly all supervisors will recognize the fairness of the situation and refrain from repeating the offense once it is tactfully called to their attention. The most direct and effective method for maintaining the proper unity of command is for the supervisor to talk it over with the other supervisor or staff member who has ignored the principle. The logic of his complaint is self-evident, and no fair or intelligent supervisor can fail to agree with it. If the supervisor is diplomatic in showing that he is losing face with his men and that if there are further infractions his authority will be undermined, he can usually arrive at a friendly, mutual understanding.

Span of Control

Supervisors used to think that if they had many workers to supervise it was an indication that they were more capable as leaders. Experience and research show that this is not true. Individual attention given to workers usually improves production, efficiency, and morale. But if a supervisor has too many people to manage, he cannot give them this necessary individualized attention. As a result, some of the workers may get little or no attention, or the group as a whole may not receive consistent help from him. It is still not unusual to hear some old-timer boasting about how he supervises fifty or more men. Of course, the desirable number of employees who should report to one supervisor depends somewhat on the skills involved, how much time is required to complete the operation, and whether the workers are scattered or work closely together. For most work it has been found that no supervisor can effectively manage more than ten to fifteen workers. It is humanly impossible for the

supervisor to know them intimately enough and to consider all the cross relationships in his group if he has more than this number. Fayol, the great French industrial engineer, computed the interrelationships present when there are ten subordinates. He found that there were 6,133 direct and group relationships when a supervisor has ten subordinates. Obviously, this is entirely too many for any supervisor to keep in mind each time he gives an order.

On the other hand, if a supervisor has too few reporting to him, he is apt to oversupervise his subordinates and thus destroy their initiative. Top executives often supervise too many subordinate officers. In general, it has been found that at top levels five to six subordinates are about as many as most executives can supervise effectively. This is because their problems are usually of a more complicated nature. Many firms have solved this problem of span of control at the foreman or chief-clerk level by upgrading more workers to group leaders or to section-head positions. Such promotions not only build morale by giving recognition to promising workers, but they also provide fine training for higher supervisory jobs. Despite the fact that more supervisory positions may be needed when a limited span of control is adopted, everyone gains. Production costs are usually lowered because of greater efficiency. Morale of the workers is improved because they have a closer relationship with their supervisor. The burden of the supervisor is lessened because he can give more careful attention to details and know and understand his workers better.

Uniformity of Assignments

"Jack of all trades, master of none." This old proverb points to the undesirability of mixing job assignments too much. When too many changes of duty are forced on a worker, he is apt to become confused. Furthermore, he can rarely point to any com-

pleted regular work which he can call his own. Workers take pride in seeing the results of their labor. So, if the supervisor continually requires the worker to shift from job to job, the worker feels that he has no job at all. We know, too, that workers like to express themselves on their jobs and to develop specialized skills. If changes of duties occur too frequently, there is little opportunity to become a master of any set of skills, and dissatisfaction is the result.

Yet it is often desirable to rotate employees so that they will be more versatile and will know several jobs. Then they can pinch-hit for absent workers and can learn additional skills which make them more valuable to the company. Of course, an employee shouldn't be moved into work which he isn't capable of performing. If the work is beyond his capacity, he will be frustrated by it. The best way to gain the full advantages in rotating workers is to move them into jobs which are related in duties. If they have done the previous job well, they should learn a related job readily. For example, if there were sixteen different jobs and sixteen workers in a department, it would normally be unwise to assign each individual worker to only one of the sixteen jobs. It would be better to line up the sixteen jobs into four or five groups which have somewhat similar duties and then rotate the employee among those jobs in the group closely related in function to his work. This gives variety in the work, avoids monotony and over-specialization, and makes for greater flexibility and versatility.

Delegating Responsibility and Authority

Think of the most successful supervisor you've known. Odds are that he knows how to delegate responsibility and authority; this is the fourth important principle of good management. Proper delegation of responsibility and authority is one of the toughest lessons to learn. It is mighty tempting for the

recently promoted manager to make a display of his new authority. He is usually a bit insecure and lacks confidence in his own ability, so he doesn't completely trust his workers. In an effort to convince them that he is competent, he insists on reports and checkups on every detail. He allows the workers little chance to use their own ideas and thus snuffs out their initiative. The result is the opposite from what he had expected. The workers say that his authority has "gone to his head" or that "he's too big for his britches." Instead of gaining prestige, he loses it. It's a sad day for the young foreman whose men catch him bluffing. It takes a lot of living with them afterward to overcome such loss of prestige.

When any responsibility is delegated, a sufficient amount of authority must go with it so that the worker isn't restricted in accomplishing his task. This is one of the most firmly established

The successful supervisor gets his orders from his chief.

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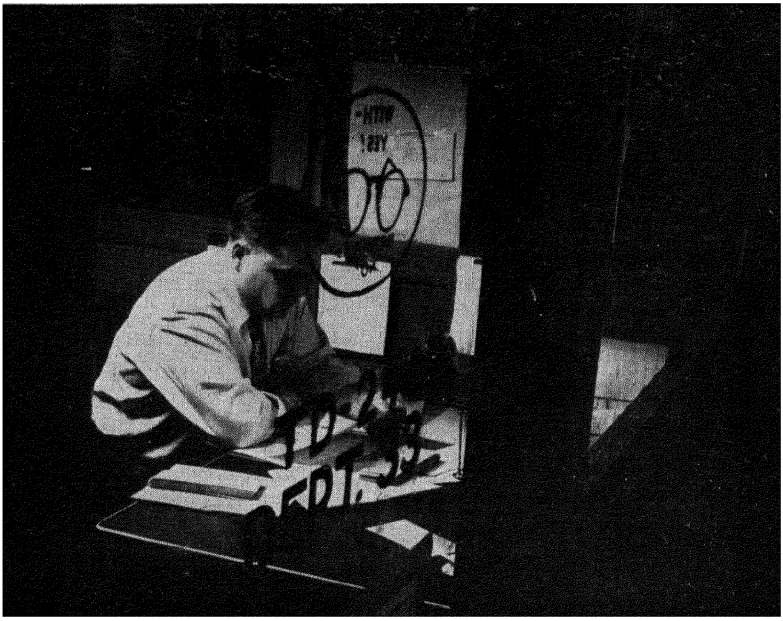


He accepts the responsibility and plans the work.

laws of supervision. The able supervisor soon learns that he must accomplish the work in his department through others, that he can't carry the full load by himself. Also he learns that his workers have brains and that he can greatly lighten his own burden by giving them freedom to use them.

Employees resent too much interference from above. It clashes with their desire for freedom of action and with their need for self-expression in work. When they aren't given responsibility in keeping with their abilities or if they are forced to run to the boss for permission before doing detail work, they feel that they are being treated as children. And they are! It is a slap at their self-respect. The supervisor who doesn't trust his men to use their heads by delegating authority can scarcely expect them

But he delegates the necessary authority to his subordinates, giving them ample opportunity to use their initiative to work out the details.

to develop initiative, resourcefulness, or much enthusiasm for the work. One outstanding superintendent tells how he developed initiative and interest in an employee who had previously been so restricted by another boss that he was afraid to do anything on his own.

"At first I gave him a very simple job to do which I was sure he could handle. When he finished it, I gave him a pat on the back and a little praise. Then I gave him a new assignment which was a good deal like the other one but more complicated. When I gave him this order, I left out a couple of details, leaving it up to him to work them out himself. After he had been at the work for a little while, he came over and asked me what to do about the details I had omitted. Instead of telling him, I asked him

how he thought it should be done. After a little hesitation he came up with the right answer. I told him that was fine and to go to it. He finished that job and seemed pleased with himself, so I praised him again. Next time I gave him only a general order and left out nearly all details. When he came back this time for instructions, he asked me again what to do. I just waited for him. Then he said somewhat sheepishly, before I had answered him, 'I think it could be done this way.' He outlined a good way to do the job, so I grinned at him and said, 'Why didn't you do it that way and not bother me?' He got the point that time. Now all I have to do with this fellow for most of his assignments is to let him know in a general way what needs to be done and when it's due. He carries on from there."

Of course, there are some inexperienced supervisors who delegate too much responsibility and authority. This sometimes happens when a supervisor ducks his responsibility for training workers on a new operation. He tosses the job at them without instruction and in effect says "sink or swim." The result is often confusion and failure. Some workers will take advantage of this situation. The supervisor finds too late that he has lost control of them and can't lead them to make the production schedules. He has left the field; he has run away from his job. Or he may assume that he must treat all his workers exactly alike. If he delegates to one, he must delegate to all. He wrongly assumes that all workers have the same abilities. The obvious answer is "know your men." Know which ones can take additional responsibility, and know how to train the weak ones to develop initiative in them.

Withholding Authority

Executives and supervisors quite commonly treasure their authority. Many of them hang onto it unnecessarily. Thus, the president of the company may decide that certain work must be

done and passes an order on to the vice-president in charge of manufacturing. In doing so, the president retains final authority of approving the work done. The vice-president passes it on to the works manager, who in turn hands it to the general foreman, who assigns it to a foreman. The foreman then passes it on to the leadman, who finally gives it to a worker. Each supervisor down the line has retained his own bit of authority regarding the order. He requires the man below him to report back and clear with him. So, when the worker who actually needs the authority finally gets the order, there is little if any left for him. His hands are tied, as are the supervisors' up the line. Thus, unnecessary red tape and bottlenecks are built up. Many checks and clearances are required for final approval. The work is delayed. About the only effect such procedures have is to build up the egos and vanities of the members of various levels of supervision. A recent progressive trend has been to channel authority especially for personnel actions from the top straight down to the first-line supervisor—in industry, to the foreman. He is given the responsibility and the authority to carry out company policy. At all times he can go to higher levels of supervision for guidance and technical assistance when he needs it. This actually gives him a closer working relationship with higher supervision and makes him feel that he is definitely a member of management.

In this chapter we have dealt with a number of the day-to-day techniques of management which concern every supervisor. We believe that the principles we have discussed apply and, in fact, are essential to good management and sound human relations everywhere that the supervisor meets the workers. Human beings respond much the same to these basic practices whether they work in offices, coal mines, banks, factories, or government. Many of the human relations principles as they pertain to supervision are incorporated in the Self Appraisal Questionnaire which fol-

lows. Perhaps you would like to check your own performance by it.

SUPERVISORS' SELF APPRAISAL QUESTIONNAIRE

How do you rate yourself as a supervisor on human relations? This questionnaire will help you analyze your strong and weak qualifications. Probably no one could get a perfect rating. Be completely honest in rating yourself on each question. Now don't be modest; but, on the other hand, don't break your arm scratching your wings.

After each question is a TRUE, ?, and FALSE. If your answer to the question as it is worded is *true* as it applies to you, make a check mark (√) under the TRUE; if you believe it does not apply or is *not true* for you, check under FALSE. If you really don't know, or you're not sure how to answer, check under the ?. Read each question carefully, and be sure you understand what it means. Some are phrased in the positive, others in the negative, so watch how the question is worded. There is no time limit, but pondering a question usually makes it harder to answer. Consider your usual or typical behavior and answer frankly.

	TRUE	?	FALSE
1. My behavior and manner with my men build respect rather than fear.	_____	_____	_____
2. I take time and pains to induct new workers and train my employees thoroughly.	_____	_____	_____
3. Before issuing an order, I consider the feelings and abilities of my employees.	_____	_____	_____
4. I am human enough to admit when I'm wrong.	_____	_____	_____
5. My word is my bond.	_____	_____	_____
6. I control my temper, even when an employee has lost his.	_____	_____	_____

	TRUE	?	FALSE
7. I encourage my workers to participate with me in management, and welcome their suggestions.			
8. I am tolerant of employees whose manner and temperament I do not like.			
9. I treat all my employees alike and play no favorites.			
10. I rarely put off till tomorrow what should be done today.			
11. I make a consistent effort to apply the Golden Rule in all my dealings with workers.			
12. I approach an individual with a smile, even when something is wrong.			
13. I make it a regular habit to speak to all my employees at least once a day.			
14. I have a good understanding of how my employees differ in interests, abilities, attitudes, and personality.			
15. I am soft spoken, though firm, when reprimanding an employee or giving him orders.			
16. I make a point of explaining to each man why his work is important.			
17. I encourage suggestions and allow my men to participate to some extent in planning.			
18. I'm not guilty of peddling gossip.			

	TRUE	?	FALSE
19. I never ridicule, or use sarcasm.			
20. I never argue with my subordinates.			
21. I never use profane or abusive language in talking to employees.			
22. My men accept my leadership wholeheartedly.			
23. I look for the real cause first when mistakes or rule infractions occur.			
24. I encourage my workers to bring their gripes and grievances to me.			
25. I listen understandingly to workers when they beef about a minor matter.			
26. I usually give the reason for my decisions to workers.			
27. I really blame myself sometimes when an employee makes a mistake.			
28. I search for opportunities to praise my men.			
29. I base my recommendations for promotions, recognition, and pay increases on merit and work performance.			
30. I think of probable reactions of employees before I approach them.			
31. I have gained the confidence of all my men.			

	TRUE	?	FALSE
32. When I must criticize an employee, I always do it in private.			
33. I am fair in dividing and assigning work.			
34. I give all employees a fair hearing.			
35. I make new employees feel at home.			
36. In my department, men are all placed on the job which best matches their abilities.			
37. I delegate responsibility to employees who are capable of taking it.			
38. I am always willing to promote, transfer, or lose an excellent worker to a job where his aptitudes are more fully used.			
39. I am methodical and consistent without being a bore.			
40. I seek to find and correct the *causes* when men seem to lie down on the job or when they try to avoid new responsibilities or assignments.			
41. I actively look for indications of bad attitudes and poor morale and try to correct their causes.			
42. I know how to motivate all my men in order to get their best efforts.			

	TRUE	?	FALSE
43. I make occasions to talk to my men about their hobbies, families, and outside interests.	_____	_____	_____
44. I always respect the confidences with which my men have entrusted me.	_____	_____	_____
45. There is a real spirit of cooperation in my department.	_____	_____	_____
46. Nearly all my employees would go through hell for me.	_____	_____	_____
47. My employees have high morale and wholesome attitudes toward the company.	_____	_____	_____
48. I inform my employees of all changes in company policy which might affect them.	_____	_____	_____
49. I promote the employee's pride in the company's product.	_____	_____	_____
50. I uphold management in all its decisions and policies.	_____	_____	_____

Now count your score. Count the number of TRUE answers and put the total below; then count the FALSE answers and put in the total. The ?'s count zero and don't affect the score. From the total of the TRUE answers subtract the total of the FALSE answers. Multiply this number by 2. This is your final score.

Total TRUE answers		Total FALSE answers			Your score
	minus		=	× 2 =	
_____		_____		_____	_____

It is possible to score anywhere between minus one hundred (− 100) to plus one hundred (+ 100). The ratings below are based on scores made by manufacturing foremen in large industries.

SCORE	RATING
− 100 to + 25	Poor
+ 26 to + 50	Good
+ 51 to + 100	Excellent

Why not check yourself again every three or six months?

QUESTIONS FOR DISCUSSION

1. How does the principle of causation in behavior influence the concept of discipline?
2. How well do we understand the causes of our own behavior?
3. How does the giving of orders on the job relate to salesmanship? Are there differences?
4. Why should orders be phrased in a positive manner?
5. Illustrate from your own experience the effect of giving orders incorrectly.
6. In what way are praise and punishment alike?
7. In your shop or office, what is the practice with reference to giving reprimands? Compare this to other organizations with which you are familiar.
8. What are the four basic principles of good supervision? How well are they carried out in your organization?

TEN

The Supervisor Rates the Worker

Jim Taub, foreman, was sitting at his desk. Before him was a stack of neatly arranged forms. It was near the end of a rating period, and these forms were the merit rating blanks that had to be filled out for each of the thirty-two men in his department. He hated these rating periods. He never seemed sure of himself; the same questions always plagued him. How would his ratings affect the future of his men? How could he possibly be accurate in rating such things as *attitude, initiative, industry, honesty,* and, for that matter, all the other factors listed?

"Suppose I *should* rate them all accurately," he mused. "Is that good? The ratings I give are considered in just the same way every other foreman's ratings are. Suppose they're easier on their men than they ought to be; where does that leave my people? Will their men get the promotions? Well, ready or not, here I go."

Accurate Rating Difficult

How can Jim be helped to develop confidence in his evaluations? His problems are old and familiar ones, and some of them have clear-cut answers. Rating isn't easy. It takes time, effort, and *training.* If the supervisor will supply the time and effort, in this chapter we will try to supply at least the background for training.

A rating system that satisfies every one is a rare thing. Perhaps it doesn't exist outside the pages of textbooks. That the need for evaluation exists cannot be denied. Employer and employee (even unions) may agree on its value, yet be disappointed or suspicious of its actual results.

With this in mind, let's examine the supervisor's job to see if a real need for service rating of some sort exists. In the first place, decisions have to be made concerning the individuals in any working force. The supervisor is the member of the management team who has the greatest opportunity to observe the worker. Therefore, the least he is called upon to do is to furnish the background information upon which decisions will be made. Often the decision is up to him entirely. Transfers, layoffs, promotions, pay increases, dismissals—these all-important and difficult decisions—must be based upon something. Often the deciding factor is not merit, even when it should be. "True merit can't be judged accurately," the argument runs. "You may *say* you're using merit, but it's just a dodge to give the company favorite a break."

Seniority versus Merit

As a result of this reasoning, seniority is often used instead of merit. There is no possible way that this practice can be manipulated unfairly. All you have to do is to count the years and weeks of service, yes, sometimes even the hours and minutes. The man with the longest service goes ahead, and the man with the least gets bumped. There are obvious weaknesses in such systems, such as entrenchment of the incompetents and stifling of the young and ambitious. Sometimes both merit and seniority are used as bases for decisions. When such is the case, merit is often ignored. Why? Because the subjective evaluations demanded in merit rating are much more difficult to make than the simple objective bookkeeping that is the heart of seniority systems.

Merit is often sidestepped also by basing decisions upon need. Single men need less than married men. Women need less than men. Youngsters need less than older, more mature persons. With rules of thumb such as these, plus a little personal knowledge about the worker, fairly accurate evaluations of relative *need* can be made. These too may serve in lieu of merit ratings, but not as adequate substitutes.

Sometimes official company policy is such that decisions concerning worker status must be based upon seniority. More often the unions insist that this should be the case. Where merit rating and seniority are combined, it is usual to place more emphasis on seniority. For example, in a current UAW-CIO agreement, the following three paragraphs are devoted to "Efficiency Performance Rating":

> (*a*) There has been established a plan for rating of employees at intervals of six months according to their Efficiency Performance Rating in their work, so that Employees above the first three Labor Grades may become eligible for and shall receive increases in pay above the automatic progression levels, but not exceeding the maximum of their own Labor Grade Rate Range. The amount of and assignment of such increases shall be within the discretion of Management.
>
> (*b*) During the operation of this plan any Employee who receives no Efficiency Performance increase on two successive ratings, and who also during the period of twelve months preceding the second such rating has received no automatic progression increase may file a grievance under the Grievance Procedure.
>
> (*c*) No Employee shall be eligible for Efficiency Performance Rating increases until he has reached the maximum automatic progression in service and/or rate in the pertinent Job Classification.[1]

[1] From "Agreement between the Doehler-Jarvis Corporation, Jarvis Division, and Local No. 19, UAW-CIO," pp. 30–31, dated June 14, 1948; expires August 14, 1950.

In the same contract approximately seven times the space allotted to merit rating is devoted to rules concerning seniority. These rules cover everything from layoff and transfer to preference for shift. The index in this contract lists 23 entries after Seniority and only one after Efficiency Performance Rating. This perhaps implies that rating is of less importance than it is in reality. Scattered throughout the provisions on seniority are phrases such as "provided senior Employees have the ability to perform the work" and "provided it is obvious that Employees are able to do the work." Such statements imply rating of some sort.

Social, political, and moral viewpoints influence to a great extent the insistence on seniority as a guide to decisions concerning the worker. For example, the feeling of moral responsibility for taking care of the older employee with long years of service demands he be given extra consideration. However, one of its strongest appeals is that seniority can be reduced to measurable and objective amounts. Furthermore, you can say what you will; we tend to respect age. While it's not the same as seniority, in general, people with greater seniority tend to be older. Somehow, we accept and even expect the older person to make a little more money, to have a little better job, even if on the basis of merit alone he is no better and maybe a little less competent than we are. This quirk in our thinking influences our judgment about people, even when we aren't aware of it. But more on this point later.

Finally in reference to this problem, we must face one of the great reasons for union preference for seniority. Whether openly stated or not, unions ordinarily feel that management just can't be trusted to operate a merit system fairly. They feel that management would spot "merit" more quickly in a "company" man than in anyone else. That this could easily be true can't be denied. But, if management really wants to discredit this suspicion, there is only one way to do it: Show that merit evaluations can be made

fairly, impartially, and accurately. To do that, foremen and other supervisors must learn and use good methods of ratings. They must learn to avoid the common errors of rating. Above all, they must be convinced that merit rating is an exceedingly important part of every supervisor's job. Yes, every foreman, for everyone in a supervisory job is a judge, or rater, of those who work under him. To do this rating, he uses some system. It may be a good system or it may be poor, but nonetheless a system.

Systematic Rating

You have a rating system whether you know it or not. You know you have one when you have forms to fill out like those Jim Taub worked with. This is the formal system. Behind this formal plan, you have another more personal method of evaluation. You aren't very much aware of this informal system, but it operates every time you say, "Dutch is a very careful worker," or "I like old Mike. He's got a heart of gold," or "I'll have to keep my eye on Slim; you can't trust that fellow." Whether or not your plant has a formal service rating plan, this informal method of opinion is constantly used in making day-to-day decisions concerning the people in your department. Our objective, then, is to put this informal merit rating on sound footing.

In a discussion of service rating a supervisor said, "Oh, I have my opinion of a man before I make out the report. I just fill in the blanks so they come out in accord with my over-all opinion of him." This is common practice. It is obvious here that the rating system did not help the supervisor form his opinion; rather, the rating form served, somewhat inaccurately, as a means of expressing opinion. Formal rating procedures can, however, assist in making accurate evaluations of workers. Their chief purpose is to give the rater a guide to the things he should look for in rating. Let's look at these rating systems and see how they operate.

Rating Standards

There are as many ways to rate people as there are ways to skin a cat, as the saying goes. Most rating scales, however, can be placed in one of two classes, depending upon the nature of the *standards* by which the men are rated. These two general types are:

1. Person-to-person scales
2. Person-to-category scales

This classification emphasizes that which is the outstanding weakness in the application of rating principles, namely, the use of standards.

Let's go back to Jim Taub for a moment. Six months ago Jim rated Mike Pilnik as the top man in his department. He had considered Mike carefully and decided that since he was the best man in the department he ought to get the maximum number of points on the scale, or maybe just a little under the maximum number. So Mike got 95. In his most recent rating he had given Mike a 90, but he still was the best man in the department. A year ago he had given him an 85, but not because he had thought any less of his work. Jim reviewed the record on Mike and asked himself why he had been so inconsistent. After giving it some very serious thought, he finally doped out what seemed to be the right answer. He had simply used a different standard of rating each time.

A year ago Jim used an *absolute* standard in measuring Mike. That time a 95 had meant "excellent" in everything from work efficiency to personality. Jim remembered saying to himself, "Nobody's that good! Not even me. When the perfect man comes along, he might get a 95. Until that time, 85 is good enough for a top-flight worker."

Six months later Mike hadn't changed, but Joe's standards had. Mike was the best man in the department, and 95 was the highest

number of points he had to give. Mike got the 95 points. That's a straightforward solution to the problem.

Jim hadn't thought much about ratings since the last time they were due. The upshot of it was that he changed *his own* standards again. This time he compared Mike to *all* the workers, past and present, that he had ever known. Few in his experience were better than Mike, but there were some. Consequently he didn't feel that Mike could rate more than 90.

Now if Jim is as confused about standards as he apparently is, how valuable do you think Jim's ratings are to the company? Of doubtful value, at best. Furthermore, if Jim uses recommended procedures and shows Mike his rating, think of what Mike's reaction will be. The important thing, however, is not what standard is used, but that the *same standards always apply.* Furthermore, if the ratings made by several foremen or supervisors are to be compared, it is absolutely essential that each uses the same standards. This requires training.

Now let's look at Jim's ratings in reference to the two classes of rating mentioned above. Last year when Jim used an *absolute* standard of rating, his rating would be classed as person-to-category. The ratings he gave were determined by his conception of what a good or poor worker was. Jim could tell you (at least we hope he could) just what the characteristics of the various classes of workers were. "A good worker is capable of turning out 5,000 units per week. A satisfactory worker can only do 4,500, whereas an excellent worker turns out 5,500 . . . , etc." Maybe you remember your math teacher in high school announcing that in order to get an "A" on the test you would have to get nine out of ten problems correct. Although it never happened, it would have been possible for everybody in the class to get an "A."

These absolute standards are fine where they are measured in terms of something you can count, like units of production or arithmetic problems. They are much more difficult to apply when

you attempt to evaluate intangible characteristics like attitude, initiative, interest in work, etc. Unfortunately it is just these latter characteristics that demand rating. If you can count production, and that's all you are interested in, the only thing you have to do is decide on how much production you consider satisfactory, good, excellent, and poor—and your rating for that trait is completed.

The rate at which a man produces is not the whole story. If you are thinking in terms of possible promotions, you must evaluate all those things which contribute to competence. These can't be counted; they must be judged.

Graphic Rating Scale

Typical of the person-to-category type scale is the *graphic rating scale*. While there are many varieties of this scale, the following is representative. In using this rating, a check mark is simply placed somewhere along the line. Of course, this is only a part of the total rating form. More items are included.

Initiative: Consider his talent for starting action. Did he see things to be done and do them?

Lacked resourcefulness; a follower	Limited resourcefulness	Resourceful	Very resourceful	Exceptionally ingenious

Attitude: Was his attitude toward the company and its policies constructive?

Not constructive	Passive; lacked interest	Constructive	Very constructive	Highly constructive

A manual is provided to go along with this scale. It tells you just how you are to make your rating, and gives more complete definitions of the traits to be rated. This is indispensable; for,

without a clearly written manual, just how are you going to determine the difference between a "constructive attitude" and a "very constructive attitude"? Of course, *you* might have *your own ideas,* but are your interpretations of "constructive attitudes" the same as those of the other supervisors and foremen? Furthermore, are your interpretations six months from now going to be the same as they are today? Probably not, unless you have some written source like the manual to keep you on the beam.

Frequency Rating Scale

Just as there are many variations of the person-to-category scales, so are there many types of person-to-person scales. One of the most common of these is the frequency rating scale. For comparison, the same two characteristics shown above on the graphic scale would look as follows on the frequency scale:

Initiative: Consider his talent for starting action; does he see things to be done and do them?

Bottom	10%	20%	40%	20%	10%	Top

Attitude: Was his attitude toward the company and its policies constructive?

Bottom	10%	20%	40%	20%	10%	Top

In the frequency scale, the rater is instructed to compare the person being rated with all the men doing the same or similar work he has ever known. Thus, he is to ask himself if he would place this worker in the top 10 per cent of this group, in the next 20 per cent, the middle 40 per cent, the next 20 per cent, or the bottom 10 per cent. For example, if James Funk has the initiative of the average worker in the opinion and *experience* of the rater, a mark is placed in the middle square below the 40 per cent.

Graphic and Frequency Scales Compared

Note that the only difference between the graphic and the frequency scales lies in the way in which the standard is defined. In the graphic scale the standard tends to be absolute. Thus, in the manual the "resourceful" person will be described, and the differences between the "very resourceful" and the "exceptionally resourceful" will be pointed out. The rater studies the descriptions of the various categories, and then decides which one fits best the employee being rated. He does not compare the persons being rated with each other. It is important that raters using this type of scale realize this point, but it is even more important that those who make up these scales understand the point. A good graphic scale is difficult to construct. The descriptive categories must be clearly written and carefully chosen.

In using the graphic scale conscientiously, the supervisor may find that the person being rated falls somewhere in between the two categories. He seems to be more than "resourceful" but does not quite fit into the "very resourceful" class. The graphic scale was designed primarily to take care of just this difficulty, for the point on the line checked indicates the degree that a characteristic is exhibited by the worker. Thus, in the case above, the foreman could check the line somewhere between the two steps. In scoring the scale, the length of the line up to the check is measured. This measurement indicates the degree or amount of the characteristic that the supervisor believes gives the true picture of the worker.

In the frequency scale, categories are not defined. The characteristic being rated is carefully described. It is assumed that people possess this characteristic in varying amounts. The rater then must think of all the workers he has ever known, and more or less accurately rank them from top to bottom on the characteristic. Of course, he can do this in only a general way. He thinks

of the best and the poorest and of some who fall in between. He then takes the worker being rated and mentally places him in one of the groups. In this way he finally decides which percentage group would be most appropriate. Once a man is placed in a group, there is no way of telling whether he is near the top or near the bottom of the group. Usually this difficulty is dismissed by pointing out that judgments are at best rough and that it is impossible to make fine discriminations.

Perhaps you have already sensed both the advantage and the disadvantage of the frequency scales. It appeals to many because it avoids the difficulty of comparing a man against an abstract definition of a category. On the other hand, it has its own problems. First, it is hard to visualize all the men you have known and to place a particular man accurately in respect to one characteristic. Since your idea of this standard group is likely to vary from time to time, so is your rating of men likely to vary.

Man-to-man Scale

A variation of the frequency scale has been developed which compensates to some extent for the latter difficulty. This is known as the "man-to-man scale." In it, each rater anchors his standard group by using actual individuals whom he has known as representatives of each of the percentage groups. He prepares *for himself* a master chart for each characteristic and uses it henceforth as his standard. The master chart would look like this:

Initiative: Consider his talent for starting action. Does he see things to be done and do them?

Highest, *Pilnik*	10 points
High, *Watson*	8 points
Middle, *Schwartz*	6 points
Low, *Wotecheck*	4 points
Lowest, *Green*	2 points

In preparing the master chart, each foreman or supervisor thinks of the man who in his estimation exhibited the highest amount of initiative. He might be working in the shop now, or he might be a particular worker long since gone. That makes little difference. The only important thing is that the rater knows the man well enough to compare others to him. Now in rating one of his own men, say Andrews, he asks himself, "Does Andrews show as much initiative as Pilnik or does he show as little as Green?"

Perhaps he finally decides that Andrews compares best with Schwartz. Andrews then is given six points on initiative. On other characteristics similar comparisons are made. The points are assigned and totaled. The men are then ranked in terms of the total number of points received.

This point must be kept in mind. The master charts must be prepared on each characteristic. The same names need not be used on the different characteristics. In fact, if they are, it probably means that the master chart has been poorly thought out. Thus, in terms of Attitude, it is quite possible that five names

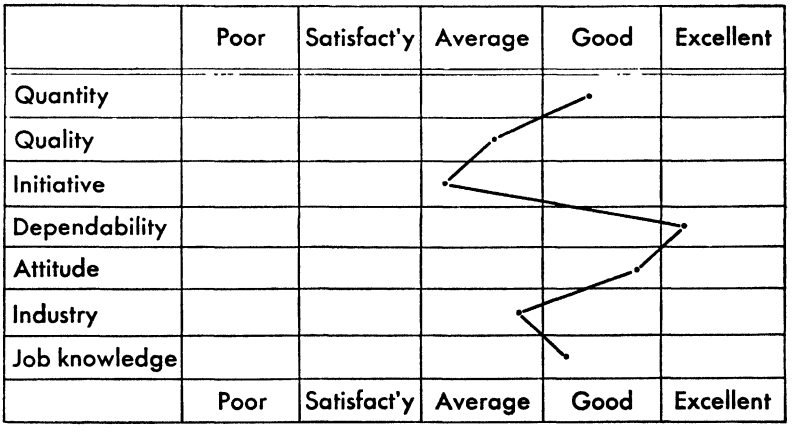


FIG. 1. A rating profile of a somewhat better than average worker.

entirely different from those previously used on Initiative may be used. However, there is no rule that some names may not be repeated. Pilnik may be highest on Initiative, and at the same time serve as middle on Attitude.

Using the Results of Rating

Rating results are often summarized by assigning point values to the various traits and adding them up. Trait values may be given different weights depending upon their estimated importance. Figure 1 shows another common way of presenting the rating. This *profile* is just a graph which makes the strength or weakness in any trait easy to see.

While it is often helpful to have the total picture of the individual summarized in a single number or even in a profile, it is necessary to realize that this does not tell the whole story. Consequently, in a thorough analysis of the rating of each man, the pattern of his rating for the various characteristics must also be evaluated.

From a statistical point of view, it is wonderfully convenient to reduce the description of a man to a series of numbers. Unfortunately, this can be quite misleading. Consequently, good rating scales provide spaces for comment. In general these comments tell why a man was rated in a particular way, and usually provide opportunity for the rater to make recommendations concerning the worker. Perhaps the best rating scales, with their several characteristics listed and rated, simply provide the foreman with a work sheet to enable him to form a wise decision or recommendation for the man in question. They serve to point out to him the characteristics necessary in a good worker. They aid him in his observation of the employee, so that his over-all opinion is based as much as possible on objective fact. They should call to his attention weaknesses in the employee, not so that he can censure him, but to enable him to counsel him and so develop

the employee into a top-notch worker. To these ends the foreman's comments and the formal part of the rating scale should be directed.

How Can Errors Be Avoided in Rating?

There is but one way to avoid errors in rating: *training!* This answer, however, needs elaboration. First, let's look at two ways in which ratings may be used. They may be used privately by an individual supervisor for his own benefit in smoothing out the human-relations problems in his own department. Secondly, and this is more common, they may be used by the company to enable it to handle fairly and to the advantage of all the employees problems of wage increase, upgrading, transfer, promotion, layoffs, etc. While errors in any rating are grievous, in the cases mentioned above they are especially so. Furthermore, in these cases a new problem of accuracy is raised. Since it is obvious that ratings of different supervisors are going to be compared, the error of inconsistency among supervisors is particularly dangerous. Who suffers when the ratings of an "easy" foreman are compared with the ratings of a "tough" foreman? Everybody—the worker, the company, and the foreman himself. This *error of inconsistency* is the major cause for failure of rating systems. Incidentally, a rating system may be a failure even though it is in full operation. It is a failure when lack of confidence in the system has reduced it to a matter of form. When it represents just so much paper work and never enters seriously into the decisions it was designed to aid, it should be discarded.

The main function of training, therefore, is to put each rater on the same footing. To do this, the raters should meet together and discuss common problems in using the rating. *First*, they should understand exactly how the rating is to be used by the company. The best practice is to have the supervisors themselves *participate* in the policy making. A clear understanding of the use and im-

portance of the scale leads to sincere efforts on the part of all raters to do their best in rating. If the practice of rating is just starting, the raters themselves can contribute much to the construction of a meaningful scale.

The *second* element in such a training program is discussion of the exact meaning of the traits to be rated. If Attitude is being considered, such a discussion would cover

1. Importance of attitude to the jobs being rated
2. Typical examples of good and poor attitudes
3. Specific meaning of attitude
4. How attitude can be rated as an independent factor

This last point is perhaps the most difficult to understand. It will be discussed in some detail later in the chapter.

The *third* element in the training program should deal with the common errors in rating. Discussion of these errors will reduce their ill effects. To eliminate them *completely* is only a remote theoretical possibility. To recognize and reduce them is a practical and necessary goal.

The *fourth*, and final, step in training is practice. The raters must actually rate their men and bring the results in for discussion and comparison with other raters. If two or more supervisors can rate the same group of men, so much the better. A comparison and study of these results will immeasurably aid the raters in the adoption of uniform standards.

In the last analysis, all rating is subjective. All subjective opinions and evaluations contain a large measure of error. This being the case, ratings can be made more accurate if they are conducted by two or more independent but equally well-qualified raters. In most shops this is difficult to do, because only the immediate supervisor will know his men well enough to do a good job of appraisal. If there is, however, more than one qualified rater, each rater should evaluate the employees separately and then get

ether to compare notes. Errors will be lessened this way, and fidence in the rating system will be greatly increased. How- r, both men must know the persons being rated. If one of the 'rs is unfamiliar with the workers, errors will be increased ıer than reduced.

ıMMON ERRORS IN RATING

ıet's examine some of the more common errors found in the ng of employees, to see if their effects cannot be lessened in solution of our own rating problems.

lalo: First and foremost among rating errors is the halo effect. Taub likes big men. He hasn't thought much about it. If you ed him, he might even deny it. "Sure, I like big fellows, but got nothing against little guys." Take a look at Jim's ratings; y tell another story. All his high ratings went to the big men; rt men got the lowest. Because of Jim's bias he put a "halo" all the big men in the shop, and the "halo" blinded him to r faults. This sort of thing would happen in his rating. When- r Jim was in doubt about how to rate a man on a trait, ether it was Quantity of Production or Initiative, or anything , somehow size entered into the picture. When Jim was in bt, big men got breaks in terms of higher ratings. Further- e, Jim is probably not aware that he is showing this favorit-

im had a run-in with Ed Edwards a month or so back. Ed told just what he thought of the company. He showed a poor tude and hadn't changed it since. Ed deserved the low rating gave him in Attitude, but Jim marked him down on Industry, ıendability, and even Job Knowledge. These low ratings ırly weren't deserved. Jim just built a negative "halo" around Ed's attitude was bad. Jim's negative feeling about this one t spread to other areas. Jim was no longer rating a number lifferent independent factors in Ed's personal make-up. *Ed*

wasn't rated on seven different traits; he was simply rated on one trait seven times.

How Can You Lessen Halo Effect?

These rules will help:

1. Be thoroughly familiar with each trait being rated. Know how it is differentiated from every other trait. Know why it is important for the job.
2. Rate one trait at a time. For example, rate the entire group, one by one, on Quantity of Production. After finishing that, rate them all for Attitude, then on Industry, etc. Thus the influence of over-all impressions will be lessened.
3. Do your rating with the idea that your entire future with this company depends upon your doing an accurate and thorough job. Maybe it does.

Leniency: Most supervisors hate to give low ratings. Look at Fig. 2, which shows the over-all ratings of over 1,000 men. Notice

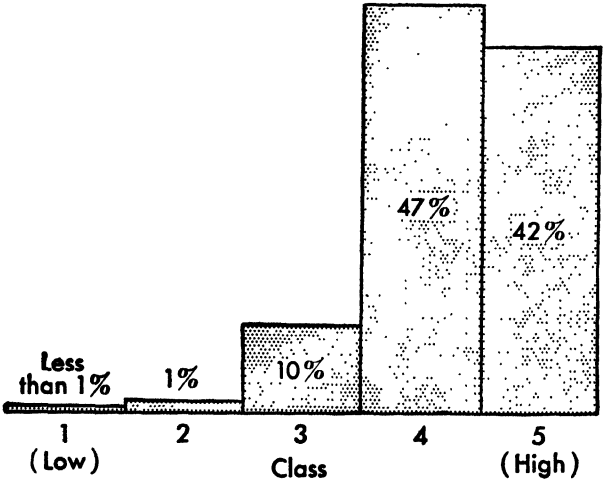


Fig. 2. Actual distribution of ratings on over 1,000 men.

that a total of 89 per cent of the group was placed in classes 4 and 5. These ratings were supposed to be above average. Class 3 was supposed to be average, but anyone placed there actually received a very low rating when compared to the others in the group. It is interesting to note that these top-heavy ratings were given in spite of the fact that the directions to the supervisors, if followed, should have led to a distribution similar to that shown in Fig. 3.

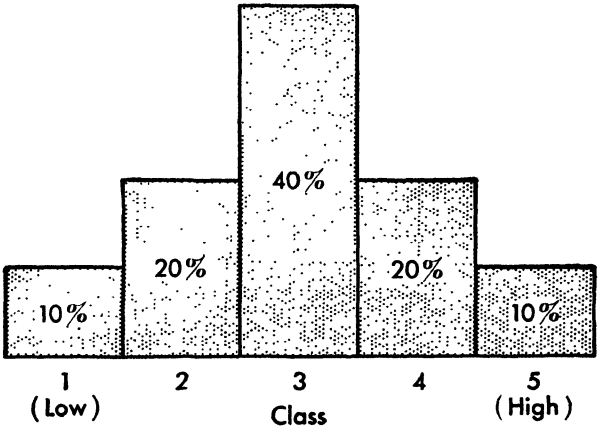


FIG. 3. The way the distribution of ratings shown in Fig. 2 would have looked if the raters had been properly trained and had followed instructions.

It is apparent from these results that the supervisors were afraid to use low ratings. These results are typical of hundreds of rating systems.

How can this error be overcome? The answer again is *training*. The supervisors must get together and agree upon how they will use the standards set up by the scale. Ratings like those in Fig. 2 are poor because they do not aid management in the locating of top-flight men. A rating system to be worth its salt should identify the very good, the very poor, and a reasonable number of grada-

tions in between. *Leniency* distorts the picture so that the only men clearly identified are the very poor workers.

In spite of the undesirability of the error of *leniency*, if all raters are equally lenient, it does no serious harm. Real danger enters the picture when supervisors differ in their tendencies to rate high or low. Thus, a major aim in training is to make all standards uniform.

Error of Recent Events: Just before Christmas Junior suddenly begins to help his mother and mind his father. The reason is obvious. Parents' memories are short. So is the memory of the supervisor, unless he takes special pains to evaluate the worker over the entire rating period. Too often, events which occur just prior to the rating swing the entire employee evaluation up or down. Nate Schwartz gives a very cool reception to one of his boss's pet ideas the day before service ratings are due. That's the only thing his boss can remember as he makes up his report on Nate. Nate's good work record during the past months is forgotten. His rating is low.

In rating, take the entire rating period into account, not just the past few days or weeks. The best practice is to keep a notebook handy to jot down observations about workers as events happen. At rating times, and during training interviews, such records are invaluable.

Age Error: The age of an employee often enters unwittingly into appraisal of him. While it is reasonable to expect that age may be an important factor in employee efficiency, it is also true that preconceived notions about the influence of age may introduce error into ratings. Tiffin, in his book, "Industrial Psychology," shows how ratings of steel workers are related to age. (See Fig. 4.) The rater must keep in mind, however, that good and poor ratings may be found in all age groups. If this were not so, there would be no point in rating. All you would have to know would be a man's age, and his rating would be automatic.

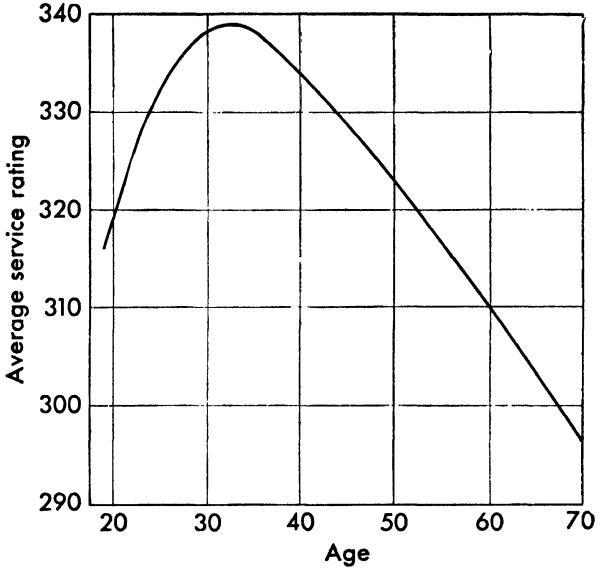


FIG. 4. Relation between age and average service rating for 9,000 steel workers. (After J. H. TIFFIN, "Industrial Psychology," 2d ed., p. 355, Prentice-Hall, Inc., New York, 1947.)

Tiffin points out other factors that influence rating. These are (1) the job, (2) the length of service on the job, and (3) the length of service in the plant. In making a rating, remember that you are appraising the man and the way he does his assigned work. If the foreman isn't careful, he may find that the factors mentioned above influence his evaluation so much that there is mighty little in his rating that reflects the man himself.

HOW TO USE THE RESULTS OF RATING

So far, our main emphasis has been on merit-rating techniques. These vary with the type of system used, but the principles have wide use. In general, rating systems are simply devices to help the supervisor arrive at a fair and impartial evaluation of an

employee. They are not ends in themselves. The important consideration is, "How are they used?" If they just clutter up the file cabinets, why rate at all?

A rating to be *most* useful should convey more information than just a point score or a position on a scale. Thus, written comments, observations, and evaluations are demanded. Finally, they should include specific recommendations. These recommendations should aid the company in dealing with the employee and should aid the employee in improving himself. One large merchandizing company insisted that all evaluations should be directed at one of five specific plans of action with reference to the employee. These were

1. Promote
2. Transfer
3. Retain on the job, with specific plans made for his development
4. Demote to more suitable job
5. Terminate

These ratings were used by the highest company officials in their plans for development of the company. They were made out by the executives of the company with the same care used in compiling the operating budget. There was nothing casual or routine about this procedure. The future of the company literally depended on the validity of these merit ratings.

Good merit rating aids the company, but does it help the employees? If used rightly, it does. Listen to what one employee said to an interviewer when he was asked why he had been relieved as a supervisor.

INTERVIEWER: Were you given any reason why you were taken off this supervising work?

EMPLOYEE: No, they never told me a thing. They took me off and made me like it. That's what makes me mad. They do these

damn things and they never give a fellow any explanation. They put anything they feel like down on his personnel record, and it goes upstairs, and the employee never knows what is on that record. I don't see how they can do that. If they put anything on the record, I don't see why the employee is not allowed to see it. I think if they would show these things to the employees, an employee would have an opportunity of correcting these things if he only knew what they were. When raise time comes along, you don't get a raise and they never give you any reason why. They just tell you that you are doing a good job, to keep it up, that they are very sorry but they didn't have enough to go around. . . .[2]

This employee has just cause for dissatisfaction. He never really knows where he stands. There are millions like him. When rating scales are properly used, they are discussed with the employees. In one large organization, where less than half of the employees were given a chance to see and discuss their ratings, over 85 per cent expressed desire for such discussions. These discussions, however, require skill and understanding on the part of the supervisor. In some measure, these interviews are directed both at training and personal adjustment. The supervisor can be guided in his conduct of these discussions by the materials in Chaps. 12 and 13.

QUESTIONS FOR DISCUSSION

1. What arguments are there in favor of the use of seniority, as opposed to service rating, in the granting of promotions? In favor of service ratings?
2. Give illustrations of the misuses of service rating.
3. Distinguish between a person-to-person rating scale and a person-to-category scale. What are the advantages and disadvantages of each?

[2] F. J. ROETHLISBERGER and WILLIAM J. DICKSON, "Management and the Worker," Harvard University Press, Cambridge, Mass., 1939. Also quoted in MILTON L. BLUM, "Industrial Psychology and Its Social Foundations," p. 63, Harper & Brothers, New York, 1949.

4. Design a graphic rating scale for the workers in your department. Design a man-to-man scale for the same workers.
5. Discuss the common errors in rating and the methods used in preventing them.
6. Why is training so important to the preparation of good raters?

ELEVEN

The Supervisor Looks at the Man and the Job

This section will be much more specific than the title indicates. In it, we wish to discuss briefly three important aspects of the supervisor's job. These three topics are

1. Accidents and safety
2. Fatigue and monotony
3. Job analysis and evaluation

Each of these topics is important enough to have a complete book written about it, as indeed has been done, not once but several times. These topics are discussed herein because we feel that the supervisor should at least become familiar with some of the major findings and practices in these areas.

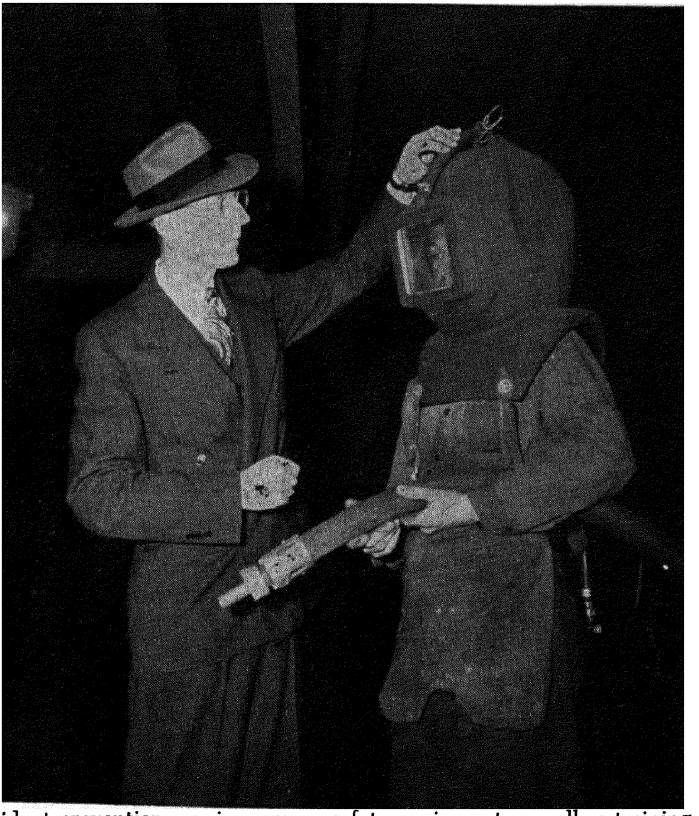
The title of this chapter says that the supervisor looks at both the man and the job. In the matter of accidents and safety, in the problem of fatigue and monotony, and in the problem of job analysis and evaluation, just this dual approach is necessary. In each, it is important to consider not only the man, his skills, and his feelings, but also his job and what it requires of the man. In these matters the worker and his job must be considered together. Let us first consider the problem of safety and accidents.

SAFETY AND ACCIDENTS

Accidents aren't just accidental. They are not due to bad luck or to chance. Elsewhere in this book we discussed the fact that all behavior was caused by something. When a workman has an accident, he is behaving, he is doing something; and his behavior is nonetheless caused even though he neither anticipated its results nor desired them to be what they were.

We can do more than simply say that accidents are not chance affairs; we can offer evidence to support this contention. It is supported by the fact, among others, that accident frequency can be and is often reduced when proper measures are taken. When traffic conditions in a city are studied by competent traffic engineers, when police officers are trained in methods of accident control by competent experts, when the courts are brought to understand their responsibility and function in the traffic-accident picture, then we can predict with confidence that there will be an over-all traffic-accident reduction. By using such methods, Colonel Kremel, of the Northwestern University Traffic Institute, is able to predict, within surprisingly narrow margins of error, just how many lives will be saved on the streets of a city and how great will be the accident reduction. He can do this because he knows that traffic accidents don't just "happen"; *they are caused.* Furthermore, he has studied the interrelation between the various causal elements, from the human, from the engineering, and from the enforcement, or legal, standpoints.

Similarly, and even prior to the study of traffic accident causation, industry has been able to make tremendous reductions in both accident frequency and accident severity. Much of this has been accomplished by taking simple, common-sense measures against known accident hazards. The high frequency of eye accidents in the use of the grinding wheel points to the necessity of

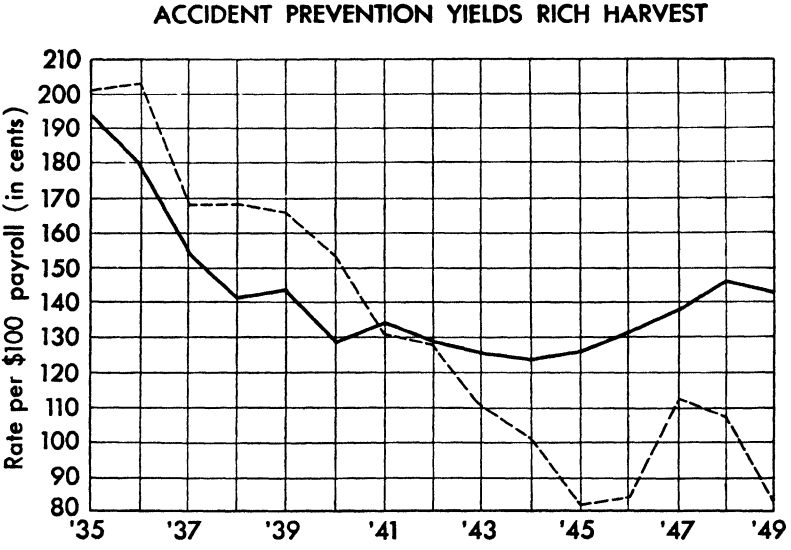


Accident prevention requires proper safety equipment as well as training and selection of employees. Here engineer examines outfit of protective clothing used for cleaning gas tanks. (*Modern Industry,* Vol. 19, No. 4, p. 40, April 15, 1950.)

safety goggles. Enforce the use of safety goggles and the number of eye accidents is decreased. Industry's feeling of responsibility for the welfare of its workers, reinforced by both legal measures and humanitarian impulses, stimulated the development of the new field of safety engineering. The results have often been remarkable. Thus, we find that certain organizations in the iron and steel industry were able to decrease their accident fre-

quency rates over 92 per cent between 1913 and 1940.[1] Other industries have shown similar decreases. The early improvements in accident frequency were largely made by providing safety guards on machinery. Later improvements were made by redesigning plant layouts and altering manufacturing processes. While these measures neared perfection, and the decrease in accidents became gratifyingly noticeable, safety men realized that the accident problem was far from whipped. Attention was then

[1] L. I. DUBLIN, A. J. LOTKA, and M. SPIEGLEMAN, "Length of Life," revised edition, p. 226, The Ronald Press Company, New York, 1949.



Insurance premiums reflect effectiveness of safety program in controlling accidents. Aside from reducing human misery which attends every accident, improved safety measures mean savings in hard cash. As safety record improves, insurance premium rates shown here go down. Liberty Mutual Insurance Company charts one furniture manufacturer's experience. The rates that were well above standard (solid line) are now way below. (*Modern Industry*, Vol. 19, No. 4, p. 42, April 15, 1950.)

focused on the human factors that contributed to accidents. By 1926, one expert had already reached the conclusion that 90 per cent of industrial accidents were caused by some human error. Only 10 per cent could be attributed to mechanical failure.[2] Other estimates since that time not only confirm this astounding percentage but in some cases tend to increase it.

In view of these facts, we can see that the problem of accident control is largely a problem of human control and education. This realization, in turn, has led to the establishment of organized efforts to educate both the workers and the public-at-large in the rudiments of safety. These educational campaigns, with their posters, their pamphlets and lectures, and their well-made motion pictures, have helped further to reduce the frequency of accidents. We find, however, that even this is not enough and that accident reduction must become an individual and personal problem. Not only must supervisors be made aware of their responsibility in matters of safety; they should also be given some basic facts about the relationship between the individual and the accident problem.

Accident-Proneness

Certain individuals have more accidents than others. It has been shown time and time again, when accident figures are studied, that a small percentage of the population accounts for the majority of the accidents. These are the "accident repeaters."

Typical of these findings are those reported by Jack A. Holmes in a study of the accident record of Benicia Arsenal during the last war. He states that, "Of the 8,138 workers who were employed during . . . (a 20-month period), 1,273 had one or more accidents. Of these, 105 incurred four or more minor and/or

[2] Morris S. Viteles, "Industrial Psychology," p. 331, W. W. Norton & Company, New York, 1932.

major accidents. Thus, 1 per cent had accidents frequently enough to indicate that they were unusually susceptible." [3]

Other studies show us, in a variety of ways, the inescapable fact that some individuals must be classed as accident repeaters. You might very well contend that the unfortunate 1 per cent mentioned in the Benicia study were simply exceptionally unlucky during the period under study and that if you took their record a year or two later it probably would be improved. Indeed, it is true that some of them might show a better record and that some of them might again be just unlucky. Unfortunately, Holmes was unable to give us this follow-up picture; but we do have it from other sources, and we have no reason to suspect that the future record of the Benicia group would be markedly different. In one study women workers who had accidents during a particular month were compared with those who did not experience an accident in that month. The records of the two groups were then compared for a half-year period. In every month of that period the accident group had more accidents, on the average, than the nonaccident group. Still other studies have shown that those who tend to have the most accidents during one period also tend to have more accidents during subsequent periods. This tendency is apparently not just a short-term episode in the life of the worker. Indeed, on the basis of good evidence, it appears that the longer the period studied, the greater the differences between accident and nonaccident groups in terms of accident frequency.

Another interesting fact about this problem of accident susceptibility is that the accident-prone person tends to have accidents, not just on one job or in one situation, but in all situations in which the possibility of accidents exists. Thus, the person who tends to have accidents on the job would also tend to have accidents at home; or the person who tends to have accidents on one

[3] JACK A. HOLMES, Industrial Accident-proneness, *Personnel Psychology*, Vol. 2, No. 3, p. 371, 1949.

kind of job is likely to have them on any type of job. More evidence is needed on this point, but existing studies seem to lend considerable support to this conclusion.

Perhaps we might look at accident-proneness as a disease of the individual or of his personality. This is not too farfetched a comparison. When we look at mortality figures, we become aware that accidents are one of the major causes of death in our civilization. Indeed, accidents lead all other causes for death for white males between the ages of 2 and 45. These figures are based on accidental death rates in the United States for the period 1939–1941.[4] We do everything in our power to rid a person of a disease such as tuberculosis or cancer. Might we not with equal logic attempt to rid him of accident susceptibility? We do not mean to imply by this that the whole solution to the problem of safety lies in the realm of accident-proneness. There is, in fact, some danger in overemphasizing it, particularly if this concept is used as an excuse to slacken efforts to eliminate the mechanical or machine cause of accidents. However, it is definitely our purpose to make the supervisor aware of this aspect of the safety picture—the human side. In assessing the abilities of a workman, the supervisor should take into account his tendency to have accidents.

Some Jobs More Hazardous than Others

Some classes of work by their very nature are hazardous. That this is so cannot be denied, but it is also quite true that personal characteristics can make a man a poor accident risk even in the safest occupation. Viteles tells of a study, conducted in Germany, based on accident insurance data.[5] The study covered ten years of accident records of 3,000 commissioned and noncommissioned officers of the German army. In practice, the premiums paid by

[4] Dublin, Lotka, and Spiegleman, *op. cit.*

[5] Viteles, *op. cit.*, p. 341.

these policy holders were determined by the risk category into which they fell, and the risk category was determined by the nature of the hazards to which they were exposed. During the second five years of the study, the low-risk group averaged .60 accidents per person, whereas the high-risk group averaged .88. Thus, as would be expected, the high-risk group experienced more accidents than the low. However, when the hazards of the job were ignored, and the same 3,000 soldiers were divided into three groups based upon their accident history during the first five years, we find the following results. The group which had experienced no accidents during the first five years averaged .52 accidents per man during the second five years, whereas the group which had two or more accidents during the first five years averaged 1.34 accidents per man for the second period. Thus, you will note that accident history, regardless of the hazards of the occupation, seems better related to accident frequency than is type of occupation. We do not mean by this that job hazard is a factor to be ignored. We wish simply to emphasize that factors within the individual are at least as important, if not more so, in determining accident frequency.

To some extent this contention is borne out by the Benicia study mentioned above. In that study, Holmes was curious to find whether certain occupations harbored more of the accident-prone individuals than other occupations. Of 27 occupations, in which at least one accident-prone worker was employed, we find that as many clerks were accident-prone as were laborers, and that only armorers and carpenters exceeded these two occupational classifications in the number of high-accident-frequency workers. Among the other occupations having one or more accident-prone individuals were instrument men, assistant foremen, storekeepers, and gang bosses. Yes, even assistant foremen can be accident-prone. It is interesting to note that Holmes found no accident-prone foremen. We will leave to your speculation, as

you read the following sections, just what the significance of this may be.

Personal Factors Related to Accident-proneness

From the time we were just able to toddle about, most of us have had pounded into us the notion that accidents result from carelessness. When we've had accidents, we've condemned ourselves for being careless and promised ourselves that we'd never let it happen again. We reprimand our children for carelessly damaging their toys or the furniture. We talk about the careless driver. But do we really know what being careless is? Actually, it's not a very clear-cut concept but seems rather to cover a multitude of things. Usually, we think of carelessness as being related in some way to paying attention; yet actually we have done very little to describe the cause of an accident when we attribute it to carelessness.

There have been many attempts to relate various human characteristics to the tendency to have accidents. In general, it is essentially like the problem of determining the characteristics of good workers. In fact, the reasons behind both investigations are identical. We want to know the characteristics of good workers so that we can tell in advance who will be a good employee and who will not. In the same way, and for the same reason, we want to know the characteristics of the accident-prone individual, so that this information can be used in the hiring or in the placing of the worker.

The detection of the accident-prone is, however, even more difficult than the more general problem of the selection of the good worker. While we now know some of the characteristics that might be identified with high accident frequency, at present it is impossible to tell in advance whether a given individual is or is not susceptible to accidents. We are forced to recognize that the best way to determine whether or not a given person is

accident-prone is to examine his accident record. If he has had an unusually large number of accidents in the past, he is likely to continue to have them unless there is some radical change in his personality, behavior, or situation.

While we must admit the impossibility of predicting the future accident record of the *individual,* study of the characteristics of the accident-prone does enable us to pick *groups* of people who will be relatively accident-free and other *groups* who will be accident-prone. Thus we might say that workers who score low on a particular test belong to a group of workers who will, in the long run, have more accidents than workers who score high on this test. Valuable as this information is, we are not able to say that John Jones, who scored low on this test, will without doubt have more accidents than Henry Smith, who scored high. On the other hand, if we refuse to hire anyone in John Jones's group, we might expect that our employed group as a whole would have a better accident record than those not hired. In some types of jobs, consequently, it may be very profitable to study the characteristics of a high-accident-frequency group and to establish hiring standards that would ensure some decrease in the accident rate. Thus, information of this sort might be valuable in the hiring of truck drivers, power linesmen, or workers in other occupations where accidents are likely to be extraordinarily costly in terms of human life and property.

Intelligence and Accidents

"Only stupid people have accidents," said Bill's supervisor, as he walked away from the dispensary after getting a report that Bill's accident was not very serious. This is common thinking; and, indeed, many accidents such as Bill's often do seem to be the result of sheer stupidity. Bill was just a young fellow, relatively new on the job. He had been pushing an empty hand truck toward the freight elevator when he heard the signal bell

indicating that someone on another floor had pushed the automatic control to set the elevator in motion. Unthinkingly, he hurried, hoping he could get his truck on the elevator in time. The front wheels made it all right; but, before he knew what had happened, the truck was jammed between the elevator floor and the ceiling. On the way up, it had splintered the wooden safety gate, which in turn fell, giving Bill a nasty cut on the head. Yes, it seemed like a careless, stupid thing to do; but Bill was by no means stupid. Fact of the matter was that personnel records showed his aptitude score to be among the highest in the department.

Intelligence logically ought to enter into the accident picture, but most scientific tests fail to show any high degree of relationship between accident frequency and measures of intelligence. One expert in traffic accidents even went so far as to state that college professors and other intellectuals could be considered poor accident risks, as far as driving motor vehicles was concerned. In so saying, he wasn't really speaking for the record but was simply emphasizing that an intellectual person, for whom driving had become a highly automatic act, tended to daydream or to think through knotty problems when he should be paying more attention to traffic. A mathematics professor he once knew drove from the Loop in Chicago to suburban Evanston during rush hour, and considered the time well-spent because he worked out the solution to a knotty algebraic equation. During the trip, fortunately, he had no accident; but our expert claims that driving requires more attention than that. On the other hand, a feeble-minded young man can be taught to drive proficiently; and, indeed, many people with very low-grade intelligence have excellent safety records. However, one such young man thoughtlessly abandoned his truck in one of Detroit's narrow downtown streets to dash over and meet an old friend of his. Fortunately, no accidents resulted from this escapade, but his actions certainly in-

creased the hazards of driving on those streets. It would appear, however, that intelligence is a factor in accident-proneness, but that its influence is dependent upon the kind of exposure to risk experienced plus other personality and behavioral characteristics of the individual.

Other Abilities and Accidents

Many varieties of tests of reaction time, both simple and complex, have been used in efforts to find the basic personal deficiencies which cause accidents. Many such tests have met with a reasonable degree of success in differentiating between accident-prone groups and accident-free groups. Usual findings are, however, that while the average score of these tests will be poorer for the accident-prone group, a considerable overlapping in scores occurs. Thus, a large percentage of the accident-free group may have longer reaction times than the average of the accident-prone group. One authority suggests that accident-prone people are likely to be those whose visual perception is slower than their motor reaction time. In other words, it takes them less time to act than it does to see or perceive. While this is an extremely interesting idea, it needs more development.

Vision

Perhaps you won't be surprised to learn that vision and accident susceptibility are related. What must be kept in mind, however, is that poor vision need not be specially noticeable for it to contribute to accidents. In one study,[6] employees were divided into two groups: Group 1 had no accidents during an 18-month period; whereas Group 2 had shown a high frequency of acci-

[6] J. Tiffin, D. T. Parker, and R. W. Habersat, Visual Performance and Accident Frequency, *Journal of Applied Psychology*, Vol. 33, No. 5, pp. 499*ff*., 1949.

dents. These two groups were carefully matched in all respects excepting their accident history. They were then compared on a series of 16 tests of vision. On three of these tests, the high-accident group was definitely inferior to the accident-free group. Two of these tests happened to be tests of acuity of near vision. The authors contrast this finding with another study in which the high-accident group was inferior in distance vision. Since the latter group was in a heavy industry and the former was in a light industry, these authors suggest that the type of industry may make different visual demands on the workman. Consequently, the visual defects which may predispose an individual workman to injury in one industry may be different from the kind of defect which would be detrimental in another. These visual defects related to high accident frequency may not be particularly noticeable to those who possess them, and certainly not to the supervisor unless he is given the results of accurate tests of vision. Such tests are becoming increasingly popular in industry and are helpful, not only insofar as they throw light on the accident picture, but also in the selection of workmen for production jobs. Results of such tests are not expensive to obtain, and they can be given in less than 10 minutes with instruments such as the Bausch and Lomb Ortho-Rater used in the studies reported here. We should remember, however, that such test standards should be "tailor-made" or established by research for the particular jobs in each company.

Age, Experience, and Accidents

Do old men have more or fewer accidents than young men? Do more experienced people tend to become more careless and take more chances and consequently have more accidents than the less experienced? Answers to these questions are important to the supervisor. Knowing the answers, he can spot where most of his attention will be needed to reduce accidents.

Age and experience go along together, but they are not the same thing. Generally, the older man has greater experience on the job; but, of course, this is not always the case. An old man can be just as new on the job as a youngster. Be that as it may, only a mature man can have 25 years experience on a job. Thus, age and experience while they are related, are certainly not the same thing.

How do these two characteristics affect the accident picture? Here is a convenient rule of thumb that can be followed until specific information is gathered in your particular industry. As age increases, accidents tend to decrease; as experience increases, accidents also tend to decrease.

Of the two rules, perhaps the first seems the more startling. Aren't young men more agile, stronger? Can't they react faster? Yes, of course, but their agility, strength, and fast reaction time are no guarantee against accidents. Perhaps this is most dramatically shown in the matter of traffic accidents.

Harry M. Johnson gives us some amazing and disconcerting figures from a survey he made of automobile accidents in Connecticut, covering the years 1932–36.[7] He states that the fatal accident rate ". . . among the drivers between 16 and 20 years of age was 1.73 times the rate for the whole population, 1.93 times the rate of their elders, 2.83 times the rate for the age group of 51 to 55 years, which has the lowest rate of all the groups. . . ." Johnson goes on to say that "the worst record was made by the drivers 19 to 21 years old, whose rate of fatal accidents per operator per annum was 1.9 times that of the whole population, 2.04 times that of the remainder of the population, and 3.1 times that of the drivers 51 to 55 years old."

Since younger employees tend to have less experience, it is sometimes assumed that the high accident rate often found

[7] H. M. JOHNSON, Detection and Treatment of Accident-prone Drivers, *Psychological Bulletin*, Vol. 43, No. 6, pp. 503*ff*., 1946.

among inexperienced workers can be attributed to their lack of age. One investigator suggests that if a group of workers of equal age were studied, we would find no relation between experience and accident frequency. Observation of accident frequency data by years and months of experience tends to point this up as an academic argument. Most such tabulations show considerably greater accident frequencies among the inexperienced. This is a fact well worth remembering.

Reduction of accidents among the inexperienced is largely a matter of training. New employees often do not know just what can and what can't be done with safety. In their eagerness to please and impress both their fellow workers and supervisors, they are often incautious to the point of danger.

While often difficult to pin down, many additional factors enter into the accident picture. Poor physical condition on the part of the worker may predispose him toward accidents. Similarly, fatigue can cause accidents, particularly when tied in with high rate of production. If fatigue simply causes a man to slow down in his work, it may not affect his accident rate. However, if under fatigued conditions he must continue to operate at a high production rate, accidents are likely to be the painful result.

Emotionality as a Factor in Accidents

You may recall the case of Ken, discussed in Chap. 5. Ken didn't want to take inventory because he feared a shortage. He came down sick that morning and avoided the unpleasant task. Suppose Ken had sprained his ankle or blacked his eye instead of acquiring the less conspicuous headache that he did. The same reasoning might have been behind it, the same kind of unconscious motivation. There seems to be a great amount of clinical evidence to show us that personality factors, problems of conflict and frustration, are important causes in accidents.

Flanders Dunbar speaks of the "fracture personality." [8] She studied the medical histories of fracture patients under hospital care and learned that 76 per cent of the previous medical contacts for these patients had been for the treatment of accidents. Heart patients, on the other hand, reported only 6 per cent of their previous illnesses had been the result of accidents. The impulsive personality, with its erratic reaction to pressure and conflict and its tendency to seek change in its environment and association, has, according to Dunbar, really a dangerous predisposition toward accidents.

If you will recall again our discussion of frustration and aggression in Chap. 5, you will remember how the aggressive tendencies caused by frustration can be turned against the self and result in an "accident." In reality what appeared to be an accident *is* the individual's inflicting an injury upon himself.

Dr. Sigmund Freud, in his system of psychoanalysis, developed an elaborate theoretical explanation of accidents. He suggested that the great majority were caused by the wishes and desires of those who had accidents. In one of his many illustrations of this point, he tells how a student laboratory technician, working with several other experimenters, had expressed a desire to leave the laboratory instead of going on with the laboratory work. Shortly thereafter, at a crucial place in the experiment, the technician was told suddenly to shut a valve. He turned the valve to the left instead of the right—an almost impossible error to make. This caused unreleased pressure to build up and break a connecting pipe. Fortunately, no one was hurt, but the experiment had to be canceled for that afternoon. When asked later, the technician had no recollection of expressing a desire to be

[8] FLANDERS DUNBAR, "Psychosomatic Diagnosis," pp. 77–78, Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York, 1943.

released from work that afternoon. Freud definitely attributes this accident to the fulfillment of a wish in this worker.

Worry on the part of the worker can, of course, be an important contributor to accidents. Not only may these outside anxieties serve as distractors, but also, by building up within the worker unreleased tensions, they may cause him in one way or another to "commit" an accident. Accidents may thus be expressions of home worries, discontent on the job, or of personal dissatisfaction.

The Supervisor's Role in the Control of Accidents

As we have seen, the control of accidents goes beyond the simple matter of providing mechanical safeguards, important as these may be. Accident control becomes a part of the intricate problem of human relations. This being the case, how can the supervisor contribute to the reduction of "non-machinery" accidents? Let's look at the possibilities.

1. *Selection of the less accident-prone.* If it were possible, by means of various selection tests, to hire only accident-free people, many of the safety problems would be eliminated. At present this is not completely possible. To some extent it is true that good selection procedures can reduce accident frequency, but probably far less than is ordinarily claimed. However, it has been noted that those tests which tend to pick good workmen are often the same tests which tend to differentiate the good accident risk from the poor accident risk. Consequently, in many industries, a good selection program designed to procure good workers should also work toward the reduction of accidents.

2. *Transfer the accident-prone.* This method is essentially a variation of the method of selection, except that now the past record serves to guide you in the selection of accident-prone workmen. By transferring the poor accident risks out of the departments in which their accidents are likely to be expensive to

life, limb, and property, some reduction in both accident frequency and severity can be made. You will not eliminate all the accident-prone in this way, but inroads into their number can be accomplished.

3. *Training.* You will recall in our chapter on Training, we said, "Safety is always a key point." Let's emphasize that again here. The new people on the job, the less experienced, are the ones most likely to have accidents. A good training program sees to it that safety becomes a part of all job skills. In training, the good supervisor sees to it that all training procedures take matters of safety into serious consideration.

4. *Care of the inexperienced.* Helping the inexperienced worker feel his way into the work environment is one of the most important jobs of the foreman. If he allows too much tension to generate in the new worker, if he relies too much on the sink-or-swim philosophy, he is very likely to be the indirect cause of accidents of new workers. This is simply a variation, of course, on training, viewed from a broader aspect than simply job training. Since hazards inherent in the job do play a part in the accident picture, insofar as possible new workers should be kept from particularly hazardous jobs until they become more experienced. Keep in mind that in one study in a textile mill,[9] workers employed for less than one month had an accident rate of 181 per cent, *i.e.*, almost two accidents per employee. Compare that with the accident rate of 47 per cent for those employed on the job between five and ten years.

5. *The individual approach.* In spite of its many difficulties, the best approach to the accident repeater is to examine the pattern of his accidents as well as the pattern of his personality to see if an underlying cause can be determined. Here is the operator of a streetcar, with far too many accidents to be purely

[9] B. FISHER, "Mental Causes of Accidents," New York, 1922, cited in VITELES, *op. cit.*, p. 351.

"accidental," in spite of the fact that many of them could not be charged to him. Careful examination of his record brought forth the verdict that he was a nervous, worried man, that he tended to be impatient, and that consequently, he started and stopped too fast for the safety of his passengers or of the vehicles following behind. Reinstruction in the operation of the streetcar was called for, plus counseling and sympathetic understanding of the personal problems which bothered him. All these were given him, and his accidents all but stopped. Many such programs of help for the individual accident repeater have proven their value. The way may be difficult, but thoroughgoing analysis of both the accidents and the personality of the man who has them pays off in the end.

FATIGUE AND THE WORKER

"I'm tired. I'd like to quit right now and go home."

There's a statement you've made or thought in one way or another hundreds of times. To explore that statement, with all its meaning for both the worker and for industry, would require a volume many times the size of this one. Some knowledge of fatigue is of value to the supervisor, because of its vital importance to work and production. The cost of unnecessary fatigue is enormous. It accounts for a sizable proportion of the difference between ideal maximum production and actual production achievements.

Over the past 150 years, industry has made a number of attempts to overcome the problem. The attempts have not always been brilliant. Since fatigue cuts down production, industry used what it thought was the direct approach in the solution of that problem, *viz.*, shorter hours of work. During the early part of the last century, 14 to 16 hours of work per day were customary. About 100 years ago, 66 hours became the established work

week. Now 40 hours per week is the accepted length. We say "accepted," but it's not always accepted in good grace.

The fact of the matter is, the long work week is inefficient. In most jobs, decrease in the work week is accompanied by increased hourly production; and if the right number of hours are provided during the week, production increases can be expected. Ask a man to squeeze as hard as he can. With the proper instruments you can tell the pounds of pressure he has exerted. Some time later, under similar conditions, ask him to squeeze again as hard as he can, but tell him to do it 15 or 20 times, or until he can do it no longer. Make sure you emphasize that each time he squeezes he should apply all the pressure he can. Now compare his first squeeze in this series with his previous record when he was required to give only one squeeze. Chances are this one will be considerably lower. In other words, there is something in a man which tells him to save himself for the long task. Don't spend your energy recklessly; save for the long pull. So it is with the long work week and the long work day. Production may suffer, even on a piecework basis, because somehow we feel we must finish the day. One pieceworker in a textile mill recognized this in herself and stated baldly that she would not do overtime. She said she could do more in a regular 8-hour day than she could in a 10- or 12-hour day. Records of her production showed this to be true.

The supervisor should know something about the facts of fatigue, in order to lessen its effects where possible. In the first place, he must understand something of what fatigue is. This is more difficult than it at first appears to be.

Three Ways of Looking at Fatigue

What the word "fatigue" refers to depends, of course, on how you define it, and this is generally done in three ways:

1. Fatigue is a state of physiological impairment resulting from work or exercise. It's a biochemical change in the muscles and nervous system that leaves the body less able to function than before fatigue set in.
2. Fatigue is a decrease in work or in production resulting from work. According to this definition, when the production curve goes down—that's fatigue.
3. Fatigue is an experience or feeling. It's a feeling of tiredness. For a more exact description you'll have to turn to your own experience and your own feelings after a hard day's work.

Most people think of these three as being interrelated. They would say that these three definitions are simply three different aspects of the same phenomenon. Thus, you work, and the fatigue products of this nervous and muscular activity build up in the cells of the body. Because this happens, you are unable to work as much as you did, so production falls off. When you experience these changes going on in the body, when you feel the way your muscles react, you experience fatigue. This experience acts as a brake on your activities, so that you don't overexpend your energies. This is a nice and concise way of explaining just what fatigue is. *Unfortunately, it just doesn't seem to work that way.* Individuals with tired nerves and muscles have been known to perform all sorts of strenuous deeds. Soldiers, during the height of battle, work and fight at fever pitch for 24 hours or more on end; yet for long stretches past their normal endurance they neither act nor feel tired.

According to our second definition, falling production results from fatigue; yet there are many other things which may cause production to drop—lack of desire to work, attitude, suggestion, etc. The best recommendation for the second definition is that it is completely objective. If the conditions are right for fatigue and

if production drops, you assume that fatigue caused the drop in production; yet often there may be a decline in the work output of an individual who claims that he is greatly tired, but the amount of work previously done may seem completely inadequate to account for the "fatigue."

Feelings of tiredness, likewise, are difficult to relate to any particular physiological condition or to the amount of work previously done. All of us have experienced fatigue on jobs almost as soon as we have started them.

We will not attempt to explain the interrelation between these three "aspects" of fatigue; frankly, we cannot. For practical purposes, however, the notions of fatigue as a falling off in work, or work decrement, and of fatigue as a feeling have important implications for the foreman and the supervisor.

Fatigue and Boredom

The difference between fatigue and boredom is less obvious than appears at first glance. Both contribute to lessened production. In fact, it is often difficult to distinguish, even in ourselves, whether we are bored or fatigued. All the bored person needs to eliminate his boredom is a change of activity. He becomes tired doing arithmetical calculations, so he starts to do crossword puzzles with no difficulty at all. In other words, boredom can be eliminated by change of activity. Fatigue is thought to be more general, and presumably is eliminated only by rest. Each of us, however, has experienced coming home from work dead tired and, in spite of that, going to a party and enjoying himself thoroughly, forgetting completely about his so-called fatigue.

One of the nicest and most practical theoretical explanations of the relation between fatigue and boredom has been made by Professor Norman R. F. Maier.[10] He suggests that fatigue and

[10] Norman R. F. Maier, "Psychology in Industry," pp. 203*ff.*, Houghton Mifflin Company, Boston, 1946.

boredom are simply two aspects of the same thing, that both are related to the amount of energy we wish to expend on any particular job. Thus, on an interesting job, we decide to go whole hog and to do anything and everything we need to do in order to get the job done. As we use up our energy and have really very little left over, then we have the symptoms of general fatigue. On the other hand, if the job is boring and dull, we are willing to allot only a small amount of energy to its performance. This, of course, is quickly used up; and as the amount available becomes less and less, we begin to get the feeling which we call "boredom." According to Maier, it would be just as appropriate to call this "fatigue." All that is required to shake this feeling is to change activities, and a new allotment of energy becomes available.

This method of looking at these two related phenomena seems to have certain advantages. In the first place, both fatigue and boredom militate against production. While industry has attempted in general to eliminate fatigue in terms of reducing the muscle demand made on the worker, it has at the same time created certain conditions which lead to boredom. Let's turn, then, to some practical suggestions which might aid the foreman or supervisor to understand some of the methods whereby fatigue and boredom could be lessened.

Reduction of Fatigue in Muscular Work

During the first quarter of this century, many scientific studies were conducted on an instrument known as an "ergograph," to determine how relatively small muscle groups worked. The amount of work that, say, the middle finger could do would be tested under varying conditions. From studies such as these, a number of ideas were gained about the way in which fatigue would affect muscles.

Suppose that the middle finger were attached, by means of a

string, to a 13-pound weight and the arm held in such a way, in the ergograph, that it couldn't move. Now if at two-second intervals the subject were required to contract the middle finger, thereby lifting the weight, we would find the ability to contract his finger muscles would decrease until the finger would no longer be able to lift the weight. This would require about one minute before what we shall call "exhaustion" sets in. Furthermore, it would take about two hours before the finger would regain its normal ability to lift the weight.

Suppose, however, you allow the finger to rest for approximately 10 seconds between each contraction. You will find there is practically no decrease in the ability of the finger to contract. Indeed, at this rate subjects may continue all day long. This is an example of a killing rate which produced exhaustion and of a slow and leisurely rate which produced results. Here is how one group of industrial psychologists have analyzed these results:

> Now suppose we compare three different methods of working. In one method, we lift the weight 30 times, then rest two hours (which we have to, in order to keep on working). In another method, we lift the weight 15 times, and then have to rest half an hour. In the third method, we lift the weight continuously, but with a 10-second rest period between *each* contraction. In an 8-hour day, we would lift the weight 120 times with the first method, 240 times with the second method, and 2,400 times with the third method. There is little question here as to which is the most efficient method.[11]

This is a striking illustration of how energy conservation and efficient production are often gained by apparently roundabout means. In this case, work repeatedly interspersed with rest produces best results.

[11] A. CHAPANIS, W. R. GARNER, and C. T. MORGAN, "Applied Experimental Psychology, Human Factors in Engineering Design," p. 382, John Wiley & Sons, Inc., New York, 1949.

nother illustration of "easy does it" is observed when one ies the total amount of work done when heavy loads are pared to light loads. Within limits, lighter loads are more ient than heavy loads. If the 13-pound weight used in the ve experiment were cut in half, considerably more than twice amount of work could be done in the same period of time. s, the amount of energy necessary to move a load increases roportionately as the weight of the load increases.

hese findings have definite bearing upon the matter of rest ods. For muscular work the best rule appears to be *to give rest period before any noticeable sign of fatigue sets in.* In e types of work, forced rest periods have been written into job description. Startling increases in production have been ined in this way. Be that as it may, most workers object to ng their activities that closely routinized. Perhaps such inization might prove unnecessary if unauthorized rest periods e recognized and utilized to best advantage. All workers take e time off during the day as their own personal time. If ial rest periods are given, the unauthorized rest pauses usu- diminish in length, but ordinarily they are not eliminated. t supervisors are tolerant of these "stolen moments" if they not flagrantly abused. With proper coaching and training on part of the foreman, the worker could use these rest periods dvantage, particularly if he were encouraged to utilize them ore being forced to do so by exhaustion or fatigue. Paradoxi- though it may seem, rest pauses are most effective when worker feels the need of them the least.

UCTION IN BOREDOM

he reduction of monotony on a job is often more easily cted than one would ordinarily think. Left to their own ces, workers will discover one means or another to relieve um. Often such methods are as harmless as frequent visits

to the drinking fountain or washroom. In most instances these breaks in the job can be attributed less to the need for relief from fatigue than to the relief from monotony. Daydreaming and talking are likewise escapes from boredom.

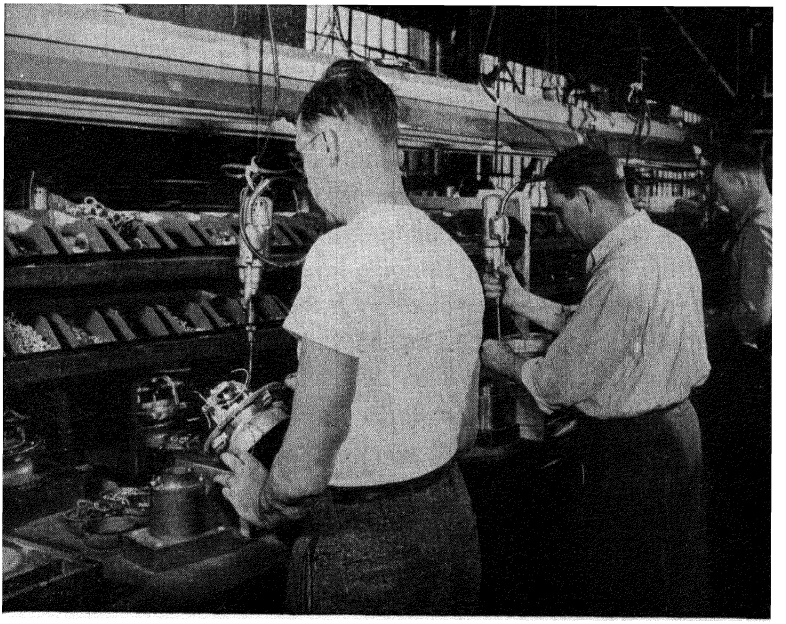
In some instances, in-plant music has proved its value as a morale builder and as a release from boredom. Such music is not a cure-all, however. In some jobs it interferes more than it helps. Where musical programs have been introduced during the day, it has proven valuable to study the effects such programs have on the workers and on their production. Some have found certain types of music more suitable than other types. Best practice seems to be to introduce musical programming during the workday, on an experimental basis at first.

On seemingly endless, repetitive jobs, the use of sub-goals to reduce monotony has been effective. The worker needs something to let him know that progress has been made. Sometimes very simple devices can achieve startling increases in production and morale. For example, by simply attaching a red tag on every one-hundredth battery to be inspected, operators were given definite sub-goals to reach, and noticeable production increases occurred. One retailer spurred his packers on to their best efforts and eliminated monotony at the same time by placing a one-dollar bill under every five-hundredth item as it traveled down the belt to be packed.

In another company, boredom on the job was reduced by adding work to it. Girls whose sole job it was to sort invoices and bills would put them in neat piles on their desks for the office boy to carry to the next floor for the next step in processing. Though the work was easy, turnover on this job was high. The girls expressed great dissatisfaction with it. A shrewd office manager eliminated the office boy and told the girls to take the stacks of invoices and bills upstairs themselves when they had sufficient quantity. The turnover on that job stopped. The free-

dom to make a decision about their own work, plus the freedom to leave their desks occasionally on official business, cut monotony and boredom and made for satisfactory workers.

In the same office, similar results were obtained when two girls who ordinarily worked side by side were separated by the length of the office. Under the original procedure, as one girl



At Air-way Electric Appliance Corporation, complete motor assembly is now done by one man. Once a job is broken down into component tasks to permit use of less skilled men, inherent job interest is increased and boredom eliminated by giving one man responsibility for entire assembly. (Take One Problem at a Time, *Modern Iudustry*, Vol. 20, No. 5, p. 58, Nov. 15, 1950.)

finished her job she simply handed it to the girl at the next desk. Since much of this work consisted of piles of sorted cards, the frequency with which these piles were dropped or knocked over proved costly in both time and temper. This sort of accident

stopped when the girls, finished with their work, had to carry the cards the length of the office to the next desk. The trip across the room acted as a sub-goal and as a reward for the girls, thereby breaking up monotonous work into meaningful units, each with its own beginning and end. The relationship between these simple devices and the problem of motivation in general is, of course, apparent. A highly motivated worker is resistant to monotony and boredom.

Other Factors Which Influence Fatigue

It has been generally recognized that the conditions of work can have great influence on amount of production. Many of these conditions, such as noise level, lighting, ventilation, work methods, and machinery design, exert their influence through "fatigue." The reduction of noise level in offices and shops, for example, is often accompanied by increases in production.

On the other hand, when experimenters have tried to show that noise hurts production, the results are often negative. One experimenter tested the production output of typists under noise conditions and under silent conditions. Under either of the two conditions no appreciable differences were found, at least in production. The most significant finding was, however, that under noise conditions, the typists had to exert more energy than under silent conditions; *i.e.*, their muscular tension increased. Thus, while noise may not seem to hurt production directly, it undoubtedly serves to increase strain and fatigue in the worker.

In a similar way, studies of the effect of proper lighting and ventilation often show appreciable increases in production. Even if production increases are not found, there is reason to believe that the long-range effects of improved ventilation and lighting are beneficial. Output or production is not the only way in which fatigue can be measured. Improved attendance, promptness, and a happy shop are wholly desirable effects which often can be

attributed, at least indirectly, to improvement of the physical working conditions.

By adopting good job methods and efficient machinery design, it is also possible to eliminate much fatigue. That good work methods are necessary for good production has been known for more than half a century. Even so, there is still much work to be done in this area. Present engineering designers realize more and more that it is better to design machines for the men who operate them than for the convenience of the machine builders. Wide-awake foremen and supervisors who are method- and design-conscious may make lasting contributions, not only to the happiness of their workers, but to production increases.

JOB ANALYSIS AND JOB EVALUATION

Matt Naybor was facing a crucial test in his career. He had had long and rich experience in the hotel and restaurant industry, and today he faced a crucial test of skill, judgment, and courage.

In a practical way, Matt had already learned some of the solutions to important management problems. This experience stood him in good stead when he became *chef de cuisine* of a large hotel, but on this new job the problems that faced him were greater even than those he had experienced first as executive chef. Now, as the new food and beverage manager of a large metropolitan hotel, he carried the responsibility for efficiently running a dining room, a coffee shop, a cafeteria, and a bar, plus arranging for all sorts of banquets. He was also charged with the responsibility for some 150 employees, and today he could scarcely recognize any of them. He knew that somehow the work in each of these departments was getting done, but as yet he didn't know exactly who was doing it; and, what's more, nobody could tell him. Surely everybody seemed busy, at least everybody he could see.

That such a situation could exist may be surprising to those who work in a well-ordered shop where there are perfectly visible machines that need tending. It may seem equally surprising to those who work in offices in which the routine production can be quickly accounted for in terms of the work assignments. Be that as it may, situations such as that which confronted Matt are far more common in shops, and particularly in offices, than one would at first think.

In spite of the pressing needs of many routine matters, Matt decided that one thing had to be done, and done as quickly as possible. He wanted to know just what jobs were being done and how many workers were employed at each. This called for an analysis of the jobs. Without an audit of this sort, he would never know for certain whether he was overstaffed or understaffed. He had a strong suspicion that his problem was one of overstaffing. In short order he found this to be true, and within a matter of months the profit picture in the food and beverage department looked decidedly better to the management.

Benefits of Job Analysis

In making the job analyses, Matt had discovered many things about the job structure in his organization. No one before had ever attempted to get any over-all picture of the ways in which the various jobs were related to each other, nor had they ever attempted to see just how much overlapping of jobs there was. This is a common experience for those who undertake a job analysis for the first time. They find, as Matt did, that all too often workers had been placed upon the payroll in a hit-or-miss fashion. Often positions are added to satisfy the demands of emergency situations or to handle peak loads. If management isn't careful, when conditions gradually return to normal, the jobs and job holders accumulated to meet unusual conditions somehow seem to remain. Matt's job analyses immediately re-

vealed this condition. Employment was geared for the peak loads of the day. By redistributing the working hours of his help, Matt was able to get by with considerably fewer employees. Incidentally, Matt did not ruthlessly fire those he considered superfluous. That, he felt, would have been too hard on the morale of his people and would ultimately affect his usefulness. He allowed his reduction to take place by normal turnover. Instead of replacing those who quit, he arranged to have their jobs incorporated with other staff jobs. As the new job combinations came into being, they were accompanied by specific job descriptions. Workers liked the definiteness with which their responsibilities were described. Instead of *losing* morale with the cut-back in jobs, morale *increased.*

The audit Matt made clarified the work situation in other ways. Uniform job titles were adopted, thereby cutting down the amount of confusion. Lines of authority were drawn clearly. Each worker knew exactly what he was responsible for, as well as to whom he should report for directions and orders. Jobs with many varied duties were simplified, thus allowing Matt to use his most skilled personnel solely for the more responsible and difficult work. By learning which job skills and how much training each of his employees possessed, he was able to effect job transfers more easily. Personnel needs could thus more often be satisfied by transfers from the existing staff than by hiring from the outside.

With the analysis complete, Matt was better able to eliminate inequities in the pay structure. He was able to evaluate and classify the jobs so that the principle of "equal pay for equal work under similar conditions" could be more closely followed.

Matt explained to his workers as clearly as he could just what he was doing. Copies of their job descriptions were given them, and the system was explained to them in detail. Matt was pleased by the way in which workers responded to the plan. They

thought it fair and objective. They saw too that training and experience would lead them up the ladder of promotion. They saw clearly for the first time just where the steps on that ladder were.

Matt had always been particularly sensitive to training needs. His work here aided him immeasurably in setting up training requirements and in initiating his training program. Of course, he also gained the very important advantage of being able to hire new workers on the basis of accurate job specifications.

One of the most important and unique advantages that came about through Matt's systematic approach to the job structure and to the organizational plan was the fact that a cost analysis could be made, not only in terms of the raw materials (in this case food) that went into their product, but also with an accurate calculation of the cost of the labor involved. Matt was very wise in having these figures actually calculated by the managers who worked under his direction. Soon they were competing with each other in finding ways in which the labor costs could be reduced.

Most of you who read these paragraphs will be either supervisors engaged in producing goods for the market or will be office supervisors engaged in handling the necessary paper work to move these goods to the market. Perhaps you will wonder why we chose the hotel and restaurant industry to illustrate some of the advantages of job analysis and its attendant techniques and methods. The selection was deliberately made to show the breadth of applicability of scientific method to problems of management. Where people are organized to work for some common goal, and where levels of responsibility and of supervision exist, there job analysis has its place. It makes no difference whether the work being done is in the shop or in the office, in private industry or in governmental services, in civilian or military endeavor, or, finally, in service occupations as opposed to production jobs.

Let's turn our attention now to a brief description of the process of job analysis and to those methods and techniques which are dependent upon it. Our discussion will of necessity be brief, but we hope that it will spur those who read it to investigate the advantages of this approach in their own job situations.

Job Analysis, Job Descriptions, and Job Specifications

Job analysis is simply what the name implies. It is a study of the various aspects of the job: the things done on the job, the requirements for it, and any other fact of importance concerning it. When the analysis is completed, the description of the job is written. In the job description the work done on the job is described and all other information necessary to carry out the purpose for which the job analysis was made is given. In addition, a job specification is usually written. This job specification tells just what characteristics an employee who is to do the job should have. It may cover his age, experience, physical condition, skills, or anything else that is considered necessary for a person to do the job as described.

Job analyses are made for many purposes. It is often wise to consider this point before the audit is embarked upon. If you can gather information for several purposes at once, a considerable savings in time and energy may be affected. We have already spoken of one of the purposes of job analysis in our chapter on Training. There, one form of a job description was given. Job descriptions can also be written and analyses can be made with the end in view of improving work processes and methods. This, incidentally, is often an automatic by-product of any job analysis. When one begins to study the job and to write down its various parts, inefficiencies in the job that can be readily corrected are often seen. Analyses, of course, can be made in order to study the health and safety aspects of the job.

When a definite written statement about the duties of the job

and about the qualifications of the person who works on the job have been made, the basic data upon which fair wage schedules are based have been obtained. We term this process "job evaluation." Job analysis also aids in determining just what the promotional ladder should be, for in job analysis the relationship between jobs is discovered. The proper sequence of promotion is an almost automatic by-product of this work.

The job specifications are, of course, of great interest to the employment department. When the employment man has this information before him, he can be of considerably greater help in locating good men for the foreman and supervisor.

Job Analysis Need Not Be Elaborate

When Matt undertook his job analysis, he prepared a number of mimeographed sheets with spaces to be filled in with a few words and phrases. Space was also provided for comment and for much of the information that we shall list below. While making the analysis, he often watched the job being done and asked questions of the worker and of the supervisor. This is the basic procedure in job analysis.

One important thing in job analysis is often overlooked. *Jobs must be described as they are.* The job analyst must tell *exactly* what the worker does, not what the worker thinks he does, nor what the analyst thinks he should do. Frequently, to save time, workers are asked to describe their own jobs. The difficulty here is that few workers can do this accurately. Either they know too much about the job and tend to be skimpy in their explanations, or they suspect the motives of the analysis and tend to exaggerate or to be too detailed. While this method is sometimes used, especially in government positions, the results must be interpreted with caution. Supervisors and job analysts should, in the light of their experience, adjust and modify the statements to arrive at a correct balance.

ITEMS TO CONSIDER IN MAKING A JOB ANALYSIS

Here are some of the things that should be considered in making the job analysis and in writing the job description and specifications. Not all analyses would require that each of the following items be considered. However, this list may be useful as a guide.

1. *What is the job title?* Here enough information must be given so that the job could be completely identified and so that, if necessary, you could find the very department, or the place in the department, in which the job is being performed.
2. *How many are employed on the job?*
3. *What is the job turnover and absenteeism?* This information not only helps the personnel department but aids planning for future needs. It may also raise the question of why a particular job has excessive turnover or absenteeism.
4. *Just what is the work performed?* The way in which this section may be written will depend upon its use. The personnel department may want a brief, over-all description, whereas for training purposes considerable detail may be required.
5. *To what extent is the job supervisory, and to what extent does it require supervision?*
6. *How difficult is the job?* This information and the information concerning supervision will aid in evaluating the pay rate of the job.
7. *What is the rate of pay for the job?* This may include not only how much is paid but how often, and perhaps even the exact time of payment. If penalties can be levied against pay, they too should be included here.
8. *How many hours are worked daily or weekly, and what are the shifts?*
9. *What are the production standards?* How much should be

produced in a week? What quality standards must be met?

10. *Is this part of a larger job, or can it be broken down into several jobs?* This is particularly important for transfers and for the efficient utilization of manpower during periods of expansion and retraction.
11. *How does this job relate to other jobs?* Is it a stepping stone to a promotion to another job, or must a worker have had certain other jobs before he can hold the job in question? Can a worker in this job be transferred easily, with little additional training, to some other related job?
12. *What are the conditions of work?* Are there any particular hazards to health or accidents? Many other features about working conditions could be included here, including such things as location, indoors or outdoors, whether the job requires a great deal of concentration, whether it has any unusual or unpleasant features, etc.
13. *What physical demands does the job make upon the worker?* Does it require a great deal of walking or standing? What kind of vision or hearing is required? This section is particularly important for those companies desirous of utilizing the help of handicapped people and overage employees.
14. *What are the requirements of the job in terms of previous experience and training?*
15. *Required qualifications.* Must the worker have special aptitudes or abilities? Are certain minimum scores required on tests of intelligence, or on tests of mechanical, clerical, sales, or other aptitudes? Is personality or appearance of importance?
16. *Desirable qualifications.* This would include the same sort of items as those listed above, but those listed here would be of lesser importance to the job and could be waived when circumstances require it.

17. *Other Characteristics.* Many items not included here may be of particular importance in specific factories or offices, and, of course, should be included. Matt, for example, included special privileges. Certain employees had keys to rooms in the hotel set aside for their own personal use during certain times of the day. He also thought it advisable to put into his job description whether or not union membership was required for the job, since certain groups of his employees were not required to be union members.[12]

Job Evaluation

One of the important uses to which job analysis can be put is *job evaluation.* It is important that the supervisor or foreman understand what is meant by this process, even though he may not be called upon to participate in a formal program of job evaluation. Job evaluation, like merit rating, is something we do, whether we recognize it or not. Basically, some sort of job evaluation has been undertaken the minute two jobs are compared. If we ignore supply and demand factors, one job draws more pay because in somebody's estimation it requires more from the worker than another job.

Formal systems of job evaluation simply try to make a systematic rating of the value of a job and thereby to determine, as accurately as is humanly possible, a fair and equitable rate of pay for the various jobs performed. There are as many ways to perform job evaluations as there are to perform merit ratings, and the principles used are just the same. However, in the case of job evaluation, in making the rating, the judges scrupulously avoid considering or being influenced by the *specific man* who does the job. They are interested only in the job itself. They are interested in how difficult the job is, how much training is re-

[12] This list is modified from that given in Carroll L. Shartle's "Occupational Information," pp. 18*ff.*, Prentice-Hall, Inc.. New York, 1946.

quired to do it, how much responsibility for human life and property the job entails. Usually in industry, each of these factors is rated independently, and the final job rating depends upon the total of these individual ratings. Sometimes the jobs are considered as a whole and are compared to certain written specifications as to their level. United States Civil Service job ratings are examples of the latter procedure. Thus, in Civil Service, the overall descriptions of the specific jobs are compared to predetermined standards for the various levels of pay. In this way, the value of the job is determined. For more detailed information concerning job evaluation, the reader is referred to specific books on the topic.[13]

Lest the foreman or supervisor get the impression that job evaluation is so highly specialized that it need not concern him, let us look at an illustration of this process, reduced to its primary essentials and used in a relatively small business.

Carl Rush and Roger Bellows, of Wayne University, Detroit, conducted a job analysis for a firm which employed only 60 workers, who were engaged in 24 different jobs.[14] To conduct the analysis, these men trained intensively the owner of the business and his five department heads. To this group was explained the use of job analyses and the particular method to be used on the jobs in question.

Job analyses were then prepared by an experienced analyst and were brought before the group for discussion. It was decided that this committee, comprising the owner and the department heads, should then judge the job according to two factors: (1) the responsibility demands of the job and (2) the educational and training requirements.

[13] J. L. Otis and R. H. Leukert, "Job Evaluation," xv, 473, Prentice-Hall, Inc., New York, 1948.

[14] C. A. Rush, Jr., and R. M. Bellows, Job Evaluation for a Small Business, *Personnel Psychology*, Vol. II, No. 3, pp. 301–310, 1949.

The actual evaluation was performed by the use of a set of cards, each with the job title on it. Each member of the committee sorted the cards into ranks from high to low for one factor at a time. The jobs were rated, first on the factor of responsibility, and then on the training and educational factor. Ratings were made independently by each of the six members of the evaluation committee.

After ratings had been completed, the total number of points for each job was determined by adding the ranks assigned for both factors of all six raters. The possible spread of total rank points could range from a low of 12 points to a high of 288 points in terms of raw scores. Total evaluated points were plotted against wage data and four labor grades with pay rate ranges were recommended.

As a result of using this relatively simple method of job evaluation, it was felt that a more equitable and accurate method of rating jobs and determining the pay level to which each belonged was accomplished. Such systems, of course, must be adopted on a company-wide basis. The foreman or supervisor cannot indulge in them independently. However, since it is estimated that some 50 per cent of all companies have some formal job evaluation system in effect, it is important that the supervisor be aware of at least the basic ideas and values in job evaluation.

The Supervisor, the Job, and the Man

While we have been unorthodox in grouping the matters of job analysis and job evaluation, safety and accidents, fatigue and boredom in one chapter, we felt that it was necessary to discuss these topics. Each of these subjects is related, in that all three involve not only the personal characteristics of the worker, but also the relation of that worker to the particular job he performs. Furthermore, these three topics serve to emphasize to the foreman or supervisor the breadth of his job. Certainly by making him

aware that each of these is a factor of importance in a supervisory position, it is pointed out once more how far the supervisor's position has come since the time that the only thing expected of him was that he be the most skilled workman of his crew. He must still be a skilled workman; but in addition, he must develop the necessary methods and techniques of management. There are many other important subjects relating to the management of job and man which are not the immediate concern of this book—such topics as materials control, quality control, cost analysis, time and motion study, and still others. The interested supervisor is advised to consult the excellent books devoted to detailed study of these managerial tools.

QUESTIONS FOR DISCUSSION

1. What is meant by the statement, "Accidents aren't just accidental"?
2. Discuss accident-proneness as a dangerous disease.
3. Could overemphasis of accident-proneness ever have a detrimental effect in the control of accidents? Why?
4. List the personal factors related to high accident frequency.
5. What can the supervisor do to control accidents?
6. Give three different ways of describing fatigue.
7. Distinguish between fatigue and boredom.
8. What are some of the ways of reducing fatigue in muscular work?
9. Consider a dull, routine job with which you are familiar or on which you have worked. Describe the job and suggest methods for increasing production by decreasing boredom.
10. Distinguish between job analysis and job evaluation.
11. List the benefits of job analysis.
12. How does a job description differ from a job specification?
13. Make a detailed job analysis of the job you now hold.
14. Relate job evaluation to service rating. Note similarities and differences.

TWELVE

The Supervisor as a Trouble Shooter—Grievances

This little drama took place in a silk mill, in Foreman Frank Jenkins' office. Ed Evans, a spinner, came in obviously excited and irritated. Foreman Jenkins had had no previous trouble with Ed. His production, attendance, and dependability were good. Ed had three years' seniority.

A Simple Grievance

Ed: I'm plenty sore. I have just one thing to say—I'm quitting payday.

Foreman: Sit down, Ed, and tell me all about it. What's the trouble?

Ed: This job's driving me nuts. It's ruining my health. My head hurts all the time. And besides, this company doesn't pay a guy enough to live on any more. The stuff's been coming to me lately so rotten that it breaks all the time. What's more, a fellow gets dizzy just to have to look at it all day. I'm taking sick leave to get me some glasses, and if I ain't paid for the sick leave, I quit! Yeah, I took aspirin, but that just slows me down more.

Foreman: (*After looking up Ed's medical record*) Ed, your medical report shows you have almost perfect 20/20 vision.

Of course, the check was made a year ago. Maybe you do need glasses now. How long've you been having these headaches?

ED: Long enough—three weeks now.

FOREMAN: Now, Ed, let's see if I have this straight. You say that for the past three weeks you've been having headaches, that you feel the work is injuring your health. Also, you feel that the rate is too low. Is that it?

ED: Yeah, that's right and also I want sick leave while I'm getting some specs.

FOREMAN: Thanks, Ed. Let's do this. I'll check the situation and let you know tomorrow what I find out. Just relax a bit till then. How about it?

ED: Okay, but I won't take much more of this.

Here we have several complaints expressed orally by Ed Evans to his foreman. They are symptoms of a grievance. It is the grievance—the real cause of the complaints—which is important. Foreman Jenkins has three choices. He may give Ed the "brush off." This certainly won't satisfy Ed. He may take Ed's complaints at face value and promise some action. Or he may carefully investigate the entire situation to determine the real causes of the grievance, then take steps to correct them and prevent future troubles. Which method Jenkins used will be given shortly.

GRIEVANCES AND THEIR SYMPTOMS

A grievance is anything that a person resents. It adversely affects a man's or a group's attitude toward the job, the boss, or the company. Grievances aren't just those difficulties submitted by unions for hearings or arbitration. That may be the legal definition under the terms of some contracts. We are considering them in their broader sense. Grievances arise from conditions within the individual, whether within the plant or outside the plant. A grievance may be imagined or it may be real. Whatever

the cause, production and quality suffer and morale is lowered when an employee has a grievance. Something has to be done about it. The immediate supervisor is logically the right person to hear about the grievance and to detect its causes. He should be the first person to try to prevent it or to settle it. The supervisor's ability to deal with grievances builds confidence in his men. It promotes his reputation for fairness.

If the situation is normal, even when working conditions are good, workers will always have some grievances. The Army learned long ago that when soldiers don't gripe, morale is low. The same is true in industry. It's natural for employees to have occasional complaints. The supervisor who prides himself on the high morale of his department because he hears no grievances is probably playing with dynamite; this usually means that the employees are repressing their complaints. They don't have enough confidence in the boss to tell him about them. The right to air a grievance and register a complaint is fundamental and democratic. Men who are given no opportunity to state their grievances build up strong, lasting resentments which eventually explode. Their morale is bound to be low. A well-operated grievance procedure is a safety valve for the company as well as for the men. Don't sit on the safety valve!

Dealing with Grievances

When a man braces himself to tell you his complaints, he thinks the occasion is important. Naturally, he feels he has a right to a hearing. He knows that all his requests can't be granted. But he has a *right to be heard.* About the worst thing you can do is refuse to hear him. You're almost as wrong when you are too casual or indifferent to his complaints.

Now let's go back to Foreman Jenkins and Ed Evans' complaints. Jenkins listened carefully and asked a few questions during the interview which gave him several leads or symptoms of

the real grievance: Ed believes that something about his job is causing his headaches. He's worried about his general health. He feels, too, that he's underpaid for the work he's been doing lately. He thinks the material he is working on is sub-standard.

Were these complaints real or imagined? Foreman Jenkins had to find out before he could decide what to do. Maybe these were just indications of some deeper hidden trouble. The easiest and first approach to an answer to this question was to investigate carefully the working conditions, to check with other employees who were doing the same work. Jenkins knew that Evans was a fairly steady worker. He knew, too, that there had been minor incidents which indicated that he had a hair-trigger temper. Ed had a reputation around the mill for not taking kidding very well. Maybe, then, these complaints were imaginary. Perhaps something else was really eating at him.

Jenkins' first step was to check Ed's production record over the past three weeks. It showed that he'd definitely fallen below his average. His earnings were about 8 cents an hour lower during that time. He checked several other employees who were working on the same silk. They, too, had slowed down and their earnings had dropped. He questioned two of these workers. They groused about excessive breakage of the threads, which forced them to give closer attention to their machines and to lose time by repairing frequent breaks. This threw the suspicion on the material rather than on some other factor which might be affecting the whole group. Jenkins next requested the purchasing department to check the quality of the shipment of silk on which these men had been working. The silk proved to be inferior to standard grade. Besides that, it was a special color mixture which had never been processed before in the company. He found out it would take about three more weeks to complete the processing of this silk. But because of its inferior quality, the company definitely would never buy any more of it. Jenkins then took a

sample of the silk and processed it himself. A few minutes of concentration on the material gave him a feeling of dizziness. This, he concluded, was due to the unusual mixture of its colors. He then removed the standard light bulb and replaced it with a blue-white one. This seemed to neutralize the colors and blend them so that he could watch the material closely without apparent eyestrain. His investigation had confirmed the hunches that he had picked up in the interview.

Resolving the Grievance

The diagnosis and the plan to correct the real cause of the grievance followed naturally. Here was a relatively simple situation which was due entirely to conditions within the plant itself. The eyestrain was caused by improper lighting. The piecework rate for standard grade material was obviously unfair for this inferior silk. He recommended, therefore, to the plant superintendent that a temporary rate increase amounting to 8 cents per hour be allowed for work on this material. Also, that blue-white light bulbs should replace the regular bulbs. The plant superintendent okayed Jenkins' suggestions on the pay increase and the lighting. It was company policy to maintain average earnings when they were decreased because of conditions beyond the control of the workers.

The treatment of this grievance was equally simple. Jenkins called the steward and Evans to his office and told them that the rate change would apply to all work on the faulty material. He explained that the new lighting would relieve the eyestrain and headaches. The steward insisted that the rate change be made permanent. When Jenkins told him that the material would run out within a couple of weeks, he and Evans accepted the change cheerfully.

To make sure that he had solved the grievance, Jenkins checked several times during the next two weeks. He inquired whether

any of the employees were having headaches. They were not. This was confirmed by the nurse who said she had had no further calls for aspirin. The employees seemed entirely satisfied with the temporary rate change. Production had even picked up a bit. No more complaints were heard.

Challenging Opportunities

Solving and remedying a grievance is one of the greatest challenges any supervisor meets. It is also one of his greatest opportunities for service to the employee, to the company, and, in fact, to himself. Grievances are often deep-seated maladjustments. Understanding and solving them tax the arts and methods of the ablest supervisor. To ferret out the causes of grievances, to understand what lies behind the surface complaints of the worker, requires imagination. It requires more knowledge and more ingenuity than most functions of management. The supervisor who knows his men intimately, who is able to relate their total personalities to immediate causes or surface situations and complaints, has taken but one step toward the solution of a grievance. What lies beneath the surface and beyond the complaint? What are the inner hidden forces and desires of the individual? The causes of the disturbance which are buried deep in his past or in events or circumstances outside the factory—these are the basic problems which the supervisor must solve to be effective in dealing with most grievances.

The ordinary boss sees only the immediate surface circumstances surrounding a complaint; he gives it superficial or indifferent treatment. The supervisor who is a leader begins with a thorough understanding of his man. He probes with all the devices and methods he can use to uncover the real causes which lie beyond the symptoms. He knows that only by discovering what is behind the scenes can he see the real motives for the grievance and work out a satisfactory solution.

All the ideas and principles which we have considered in previous chapters have a direct bearing here. A supervisor when faced with the symptoms of a grievance should have many facts at hand to help him. Past observations and experiences with the worker have given him an insight into the man's total personality. He knows his level of intelligence, his aptitudes, his interests and attitudes, his emotional and temperamental and moral qualities. He should have specific information regarding the man's past history and at least a general understanding of his early years, past work experience, education, and home life. He knows that he must look at the worker in his total environment. Many grievances stem from causes far removed from the workbench. Grievances are often complex and irritating, but they should be looked upon as a great opportunity for leadership and a challenge. Essentially solving grievances is trouble shooting. But it is more than this. By getting to the root of grievances and eliminating them, the supervisor not only clears up troubles but also constructively builds morale. He is doing a service to the worker and the company by bringing satisfaction to individuals and making it possible for them to be team workers. He is helping them to adjust to the job and to the whole environment. He clears the way for progress. And when he solves minor dissatisfactions, he often prevents later major misunderstandings.

Investigating Grievances

The simplest sign of a grievance is a complaint. Evans comes to his supervisor and gripes about some person or condition which, according to him, is directly related to his work and job. Here the supervisor must distinguish between a complaint and a grievance. The complaint may be the expressed symptom of a deeper dissatisfaction. This is the real grievance, the real cause or condition from which the dissatisfaction comes. Only rarely does the employee complain about the real source of his trouble.

Such complaints are usually easy to solve or prevent. The alert supervisor knows that a complaint usually calls for a thorough investigation. All the facts must be gathered and analyzed before any solution can be attempted. The supervisor is indeed fortunate if the men come to him (as did Evans) with their complaints. This is a sign that they have confidence in him, that they believe he will do his best to help them. A grievance like Evans' is simple, since the real cause is *within the shop* and can be traced and easily corrected.

But the most dangerous grievances are usually those which are not openly indicated by expressed complaints. Evidences of work slowdown, numerous requests for transfer, excessive absences, high turnover, signs of individual or group frustration, and low morale—these are the red flags of danger. When these conditions aren't accompanied by verbal complaints and belly-aching, the supervisor had better call for help immediately and undertake a sweeping investigation into the causes. For these are the deeper symptoms of grievances that can easily lead to widespread disorder and bitterness. They are dynamite! In our discussion, however, we shall consider those which come to the supervisor's attention through verbal complaints. The same principles for resolving them apply to the hidden grievances, once they have been smoked out.

SETTLING GRIEVANCES

Settling most grievances requires the following steps:

1. Hear complaints.
2. Interview.
3. Investigate conditions and check facts.
4. Diagnose cause by analyzing and interpreting facts.
5. Plan solution.
6. Apply solution—help worker make adjustments.
7. Check results—follow up.

Hearing Complaints

Like all other human behavior, grievances have a cause. To treat the grievance, the supervisor must search for and find the real cause. Now, in most instances people don't know the real causes of their actions. So it is with grievances. The causes of grievances should be sought in three areas. They are (1) within the individual, (2) within the shop, and (3) outside the shop. The grievance may lie in any one of these areas or in all of them. Whatever the source, they definitely affect the individual worker. They upset and disturb him. The real cause is usually obscure to him. He usually misinterprets it. Then he complains about something else or spends much time in brooding and worrying. Often he is disturbed, tense, and irritable. He exhibits symptoms of frustration. His work suffers. To correct the situation, you must eliminate or adjust the conditions in or outside the plant; or you must bring about an adjustment within the individual worker himself. He may then arrive at a more wholesome interpretation of his problem and seek for himself the solution.

Listening

The first step in settling a grievance, hearing complaints, uses all the devices of listening. Your purpose is more than just getting the complainer to talk. That is part of it, all right, but your big objective is to get at the *cause* of the worker's grievance. In other words, you must understand what the complaint *really means to him.* Now, let's review what it takes to be a good listener. First, calm down, keep cool, relax. If you are excited or angry, you are in no condition to listen intelligently. Your own emotions will unconsciously cause you to distort or misunderstand what he says. So if you're hot under the collar, wait a while to cool down before you take up the complaint. But don't put him off indefinitely. This is usually interpreted as indifference or antagonism.

When you are relaxed and calm, you're ready to listen. Of

course, you will listen to the worker in some private place where no others can kibitz. Real listening means *don't talk.* Don't interrupt. Don't contradict. Let him communicate his ideas to you. Allowing the worker to voice his complaints and make his statements without interruption makes him feel that you are trying to be fair, that you are interested. This takes some of the heat out of his complaint. Give him your complete attention. Show a genuine interest in him and his problem by your manner and concentration. This can't be faked. It must be sincere and genuine interest even though you may find it very irritating. This attitude on your part encourages free expression and confidence.

Don't argue. Never preach or give advice. Arguing usually stops free expression. The emotions and attitudes behind nearly all arguments accuse the other fellow of being in the wrong. This blocks the individual and makes him resentful. When you contradict him, you rub salt in the wound. He feels more injured than ever. His complaint looms larger in his eyes. Preaching and giving advice have the same effect. A man who is cut off in his story before he has given full expression to his complaints feels that you can't possibly understand his problem. He is unlikely to accept your advice. But worse than this, you won't get a whole story. You won't get the story with its true and complete meaning if you cut him off and start giving him advice. Often this is true even when all the facts seem very clear to you. Grievances aren't simple. In many cases you will miss the essential cause unless you hear him out completely and make further investigation.

Consider His Attitudes

Don't listen just to the words the worker says. Study what lies behind the words. Try to figure out what his expressions mean to him. The words he uses may have a different meaning for him than they do for you. It is the meaning he attaches to them that counts. These differences in the way words are interpreted by

others cause many misunderstandings. Consider his attitudes behind the words. Which ideas does he emphasize by his voice or mannerisms? By his facial expressions? These are all clues to the motive behind the words. Sometimes what he doesn't want to say, or cannot seem to express, may be more important than anything he actually says. A subject or idea which is embarrassing to him or which fills him with great emotion often causes a blockage in speech. These hesitations or blocks may be very significant and may point to the hidden meanings in the whole situation. These may suggest the things he feels guilty about. Omissions and things he won't say may point to faulty thinking on his part. Such gaps usually indicate areas in the situation which he would prefer to suppress. The able listener notes all these by-products as the other talks.

Restating the Complaint

When the worker has finished his complaint, try to summarize it to him in simple language without distortion or twisting. Ask him if your statement is a fair one, if you have understood him completely. Some supervisors make it a practice to ask all men who feel they have a grievance to tell the story more than once before they make any comment. This usually makes the complaining employee feel that you are judicious, that you are making every effort to be fair to him. Frequently, when he repeats his complaint, he changes his way of expressing it. He develops new angles and ideas. These new points of view sometimes suggest to him a solution to the whole problem. He gets a new slant on it, and he may even solve the grievance himself. At any rate, he always gets something "off his chest." He feels better because he is relieved of much of the anger and emotion that first surrounded his complaint. By listening, the supervisor has gathered valuable facts and has put the aggrieved worker in a proper frame of mind for the next step, the interview.

Grievance Interviewing

All our previous comments on how to interview apply to grievances. But your interviewing must be more skillful with grievances than in most other instances. Here you use the interview as a diagnostic device. You are trying to uncover what lies behind the symptoms which you discovered while listening. Again, argument and giving advice must be avoided at all costs. All your efforts are pointed toward getting a better understanding of the whole individual. Get more information. Penetrate the background. Yes, often, even learning about a man's home life and his early history may be most important. Nearly everyone is eager to talk about himself. By tactful questions, a skilled interviewer gets the worker to open up and talk about the other things that surround his problem. Well-directed questions reveal the things that worry him: his desires, frustrations, and demands. Information so obtained will verify or disprove the hunches you got while listening. Your follow-up questions throw more light on the entire circumstances. The ideas he conveyed to you in his complaint are placed in perspective in the man's own environment. You see the whole person in relation to other things that are important to him, things which surround his problem and which he did not mention in his complaint. You must be especially alert to detect the attitudes, the opinions, the prejudices, the feelings, the aspirations, and the beliefs that are shown during the interview. What is this person's way of life? What are the pressures, demands, desires, and sentiments which drive him into expressing a grievance? These words of his—are they symptoms of a deeper seated conflict? The interview, then, must be an information-gathering device which penetrates beyond the complaint, which looks for the cause of the grievance in all phases of the worker's conditions, inside and outside the shop, and the conflicts within the individual himself.

Investigating Conditions and Checking Facts

Interviews usually bring out numerous statements and conditions which require a careful investigation to make sure they are real. Charges must be verified and facts established. In most grievances there are a good many conditions that can be studied and evidence that can be gathered and checked. Production records, attendance reports, medical reports, and personnel histories are usually available, to mention only a few sources of information. Interviews with other employees and supervisors may throw additional light on the problem. The nature of the complaints suggests the kind of investigation to be made.

Diagnosing the Cause

Verified facts and conditions lead to the actual causes of the grievance, but most grievances aren't so clear and simple as the Evans case. Many of them need imagination and ingenuity and much understanding of human nature for the supervisor to diagnose the true cause. The facts and suggestions which have been uncovered in the investigation and the interview must be placed side by side. They must be analyzed and interpreted in the light of the whole personality of the aggrieved employee and his environment. Frequently a supervisor must call for expert help and advice before he can take the next step of planning the solution.

Planning the Solution and Adjusting the Grievance

The plan and adjustment usually follow naturally enough, once the real cause is known. Correcting plant conditions, if they be the cause, may be quite simple. But if the grievance stems from something outside the plant, it may be much more difficult to adjust. It may come from the worker's home life, or even worse, from some emotional disturbance of his youth. Perhaps it may not be possible to arrive at a completely satisfactory solution and

treatment through the supervisor alone. The employee may need the professional help of a counselor or a psychiatrist. In any event, a thorough understanding of the cause will point to ways of relieving the situation. Pressures can be eased; new work assignments might be possible; further opportunities for the worker to get things off his chest can be arranged.

Checking Results

No grievance adjustment is complete unless the results are checked carefully. A follow-up must be made to ensure that the correction is effective and that other problems haven't been created. When grievances are properly solved and corrected, the results usually are quite apparent. Even so, further discussions with the employee concerned should be held, to be sure that the whole matter has been cleared up effectively.

A Grievance from outside the Shop

The production record of Mike Callaghan, a grinder, for the past two years had been slightly above the department average, but in the past two weeks it had fallen off a bit. His foreman, Carter, made a note to jack him up about it. Mike by-passed Foreman Carter and went to his general foreman, to whom he complained bitterly about his pay. He claimed he wasn't paid what he was worth; that his job was lousy; that his foreman had it in for him. Carter was no good or he would have had the job retimed long ago.

Mike expected the general foreman to blow up. He was ready to go to his steward and start something. To his surprise, his general foreman called in Foreman Carter, and the two of them let Mike "blow off steam." Then they asked Mike some questions about his family and his former work and got him to talking.

Mike told them that he had once made more money on another job. He had three kids, and his wife was expecting another

in about four months. Things weren't going well with her either —complications. He owed three months' rent besides all the doctor bills, and the hospital expenses to come scared him.

Clearly here is a grievance caused by conditions outside the plant. Perhaps some supervisors might feel that these were personal matters of no concern to the company. Yet the home conditions had affected Mike's production and his work attitude. His grousing would certainly do no good with other employees. But Mike's supervisors knew that they were dealing with the "total man." Mike was "all of one piece." His outside problems changed him and directly affected his work just as surely as things which happened within the shop did.

Listening and interviewing uncovered the causes of his grievance. A loan arranged by his foreman through the company credit union and a few home calls from the visiting nurse relieved Mike's worries, and his grievance vanished. He himself later admitted that the rate for his job was fair.

Grievances from Conflicts within the Individual

Chapter 4 reviewed the conditions and incentives which brought about job satisfaction to workers. These are the needs which, when met, usually result in happiness and adjustment to the work. No two workers make exactly the same demands on their jobs. One may put more emphasis on security, while another may insist on comfortable working conditions. Nevertheless, all workers are eager for the satisfactions which these incentives bring. When they are not supplied to a reasonable degree, employees are frequently out of adjustment with their jobs; the result often is a grievance. It is natural for nearly all men to want security and steady work and to want to be rewarded by fair pay for what they do. But we have also noted that employees have other basic needs, which are social and psychological in nature. They also want to be recognized by their fellow workers and

supervisors as individuals. They want to feel worth while and important. They want to be insiders and to be accepted by others in the work group. They want an opportunity for self-expression and a chance to think and plan for themselves, and they want to be their own boss part of the time. All these things are necessary for workers' satisfactions and adjustment.

In Chap. 5, we have noted that when people are blocked or thwarted in their efforts to gain these satisfactions, frustration often results. Frustration produces many complex reactions: aggression, escape, detour behavior, etc. When one or more of the important satisfactions or demands are denied the worker on the job, some of these symptoms of frustration may show themselves, and complaints and grievances are the result. In the two grievances (Ed Evans' and Mike Callaghan's) that we have considered, the basic causes were simple. When conditions inside the plant were changed, Evans' grievance was settled; and when Mike was assisted with his home problems (outside the plant), his grievance disappeared. The majority of grievances, however, are much more complicated than these. Most of them involve internal conflicts within the individual himself. His inner yearnings, demands, sentiments, and attitudes are usually the result of his earlier experiences. Events that happened to him in his boyhood may so warp or condition him that he is constantly seeking satisfactions for the needs which were denied him then. On the other hand, the comforts and pleasures which he had in his youth may have been so satisfying that he is ever striving for more of the same; he seeks in his work the relationships and friendships of his former environment.

Complex Grievances

In nearly all grievances, we find an interaction of all three aspects: those within the individual himself and those inside and outside the shop. No single condition accounts for the grievance.

The reason for this is easy to understand. A man is not a different personality just because he is inside or outside the shop. Anything which effects him *anywhere* happens to all of him. He reacts to it as a total personality. Disturbances of any kind affect the whole man. Thus, if a man is ill, he is emotionally depressed. Or if he is mentally disturbed, physical sickness is often the result. When he is depressed by home conditions, he is "out of sorts" and cannot work effectively. Trouble in the shop bothers him, so that he is grouchy at home or touchy with his friends. His equilibrium is disturbed in his whole environment. On the other hand, when a man gets a lift through some success or recognition in or outside the job, it affects his outlook on the job and elsewhere. He is happier and makes a better adjustment. Or achievement and recognition at work brighten his home life and make him a better companion. He feels physically better and his attitudes and outlook improve.

Importance of Earlier Experiences

Experienced supervisors and counselors know that these internal conflicts and needs, which may stem from remote causes, sometimes cause the worker to make impossible demands. He may be seeking to compensate for things which were denied him in his youth. His early experiences make him expect far too much on his job. Or his family or friends make demands and set goals for him which he cannot attain. The resulting frustration and inner conflict cannot be satisfied by his supervisor or anyone else simply by making changes in the work situation. Something must change within the individual himself to bring harmony in such conflicts. He must change and modify his demands. He must revise his goals. He must change his sights if he is to adjust to his work. Somehow he must be helped to re-evaluate his needs with actual conditions. He must come to grips with reality. Here the supervisor or counselor often can help him to get a new perspec-

tive and thus bring about the necessary adjustment. Some individuals are able to make such adjustments fairly easily when they understand the underlying causes and see what they can do about them. Others give up or refuse to try. Much seems to depend upon the individual himself.

Typical Reactions to Common Conflicts

Obviously, it would be impossible to catalogue the multitude of internal conflicts and reactions which result in grievances. It may be helpful, though, to look at a few typical ones which often follow a fairly similar pattern. The conditions which cause the conflict in the three cases which follow are much the same: the reactions of employees to insecurity at home and to harsh, dominating parents. The grievances which result from these remote causes and the adjustment which each worker makes all differ. While these cases are made simple for illustration, these behavior patterns have been repeated so often that they suggest more or less typical responses for which to look.

Case 1

Bill complained to his supervisor when another man in his gang got a promotion. He insisted that he was just as good, that his record and production were equal to or better than that of the promoted employee. He had been overlooked and treated unfairly. The foreman had it in for him.

Several extended interviews and a lot of checking were needed to run down the basic cause of Bill's dissatisfaction. Here are the facts. His complaints actually are the expression of internal conflict against a dominating, harsh, and brutal father. His parents were uneducated. They quarreled constantly. While he hated his father, he had a strong affection for his mother, who stimulated his ambition. His complaints of unfairness and lack of progress show his strong desire for status and success. He wants to be different from his father, to be superior to him.

In treating Bill's grievance, his supervisor pointed out to him that the man who got the promotion had been taking evening courses which prepared him for the job ahead. It wasn't a matter of favoritism but a case where the fellow who was ready for the promotion got it. By recognizing his own inadequacies, Bill was able to make a wholesome adjustment to his conflict (the reaction against his brutal father projected to his foreman). He realized that if he were ever to gain a promotion he would have to improve himself. He is now taking extension courses. Thus he satisfies his drive to be educated and different from his father and prepares himself for promotion on his own merit. Bill made a positive adjustment to his inner conflict.

CASE 2

When George's production fell badly behind, his supervisor interviewed him to determine the cause. Several of George's replies indicated his attitude and complaints. "This job's too hard." "How can I help but get behind in the work when it wears me out?" "Why should I try harder? We'll all get laid off anyhow."

Again, several interviews were necessary. George finally spilled over, and his foreman got at the underlying sources of his attitudes. George never had security as a child. His parents had separated and reunited several times, shipping him out to relatives. His father was shiftless and had held seven different jobs in a single year. George was shuttled back and forth between several homes and never felt the security of a permanent home. He suspected that he was illegitimate and not wanted.

George reacts to his insecurity and his unstable parents by lying down on the job. His frustration shows the symptoms of resignation; he gives up. He doesn't care what happens so long as he just gets by. He has lost faith in his own ability. Despite proof from a physical examination that he was suffering no ill effects from his work, he failed to respond to suggestions for his

own improvement. He is following the pattern of his unstable parents. Eventually he quit to seek another job where "I will be appreciated," as he put it.

George's whole history is that of a floater, going from job to job in search for security within the job itself. He is unable to make the necessary personal adjustment by himself. He would probably profit from professional psychiatric treatment.

CASE 3

Al's case also shows the common thread between home and job attitudes: the feeling of being unappreciated at home and the desire to compensate for it by getting "in good" with the boss. The boss, in his case, takes the place of the parents who neglected him. Al's grievance didn't show up until he threatened to quit his job. He complained that "My boss has it in for me. He doesn't appreciate me." These comments came when his foreman requested him to take a temporary transfer to a less skilled job in another department because the regular work was slack for the time being. Al interpreted this as a personal insult. He said, "The boss is making a monkey out of me."

This investigation, too, revealed a common problem of insecurity in the early home. He came from a large family. His parents paid little attention to him, seldom showed signs of affection. He was dominated by his older brothers, who were harsh and unsympathetic. Al's reaction to his childhood was to try to find a close personal relationship with his boss. His yearning for attention and security was transferred from his home to his job. In his sentiments, his foreman took the place of his father. He craved constant attention and praise, which was denied him at home. When he was asked to take a temporary transfer, he took it as a personal slur; the foreman didn't want him around.

Al's new supervisor explained to him that other men in his department were being laid off. Al was being given a temporary

transfer because his foreman thought he was a good man and didn't want to lose him. When he was assured that he would get his job back with his old foreman as soon as work picked up, he took the transfer, though somewhat reluctantly. He repeated his desire to get back to his foreman as soon as possible. Here we have an example of a superficial adjustment. So long as Al gets sufficient personal attention from his supervisor, his adjustment to that particular job will probably be all right.

Adjustment of Inner Conflicts

The cases of Bill, George, and Al all illustrate how different individuals react to somewhat similar home backgrounds, to insecurity and lack of affection. Each compensates for his insecurity by different behavior. Bill overcomes his troubles by a wholesome adjustment and reorientation of his attitudes. George gives up and fails; he rebels against authority by running away. Al latches on to his foreman, who replaces his father in his sentiments. The treatment for each must be different. George and Al would benefit from the professional help of a counselor or psychiatrist. All made demands which usually are beyond the scope of the company to satisfy. What they seek from their jobs is clearly related to their sentiments, which spring from conflicts of youth and the things they were deprived of while growing up. They are "pushed by past experience." Those in good mental and emotional health are usually more realistic. They seek satisfactions and make adjustments which can counteract unfavorable influences (as in Bill's case). But those with weaker personal qualities seem compelled to repeat their earlier experiences on the job in an unconscious hope that by repeating them they can master their conflicts. Often they make demands of their work which are too great to be met and so lose out in their struggle. Their adjustment must come by resolving their inner conflicts.

FORMAL MACHINERY FOR SETTLING GRIEVANCES

The whole history of industrial relations shows clearly that nearly all grievances can best be settled on a man-to-man basis. Resolving grievances and bringing about adjustments with dissatisfied workers is one of the greatest contributions that a first-line supervisor can make as a member of the management team. The man who succeeds does so on a solid foundation of knowing his men. But, in addition, as a representative of management, he maintains an open-minded and unprejudiced attitude toward the workers and toward the unions. He makes every attempt to bring about harmony within the scope of the company's policies by unearthing the true facts and by working out a solution which will resolve the grievance. But he must do so within the framework of labor law and company policy. Established rules must be respected. He must clear his recommendations with his own superiors. Occasionally he will be overruled. Or, an employee or steward who isn't satisfied with his decision may take his complaint higher up; he has a right to do so. In such instances the supervisor should not sulk if he is overruled. The employee is impressed with the supervisor's fairness when he admits he can't be right all the time. When a grievance is finally settled, consider the matter closed. Don't hold a grudge or continue to remind the employee of it.

Steps in Grievance Appeals

Nearly all firms have come to realize that the best way to prevent grievances from becoming major issues is to solve them immediately by bringing together the aggrieved worker, steward, and immediate supervisor. Their intimate knowledge of conditions is the best hope of creating harmony. The ever-increasing number of companies which have embarked on a sincere program

of union-management cooperation report that the number of grievances declines sharply and that many major ones are prevented by these first-step hearings. However, most union agreements provide for appeals to higher levels in management and union organizations, and finally to arbitration when these measures fail. A typical grievance and arbitration clause, taken from a

Here an aggrieved worker, his union steward, and his immediate supervisor are meeting with the general foreman. They are trying to bring about a satisfactory settlement of the worker's grievance before arbitration becomes necessary. Management and the union work together and help establish mutual confidence.

union contract with a large industry, is quoted below. Note that five steps have been provided for hearings at various levels of company and union management and that time limits for these hearings are established. When all these fail, a grievance must be

submitted to outside arbitration. The following grievance and arbitration clause appears in the union contract of a large manufacturer of automobiles.[1]

> SECTION 1. Any differences arising from the company and the union or its members shall be settled in the following manner:
> *First:* Between (*a*) the aggrieved member of the Union and his steward and (*b*) the foreman of the department involved.
> *Second:* Between (*a*) the aggrieved member's steward and the chief steward of the department, and (*b*) the foreman and superintendent of the department. In the event that an agreement cannot be reached, the chief steward may contact the plant committemen who will endeavor to effect a settlement . . .
> *Third:* Between (*a*) the shop committee, which shall consist of not more than five (5) members, and (*b*) the plant management. The Department's chief steward shall attend if his presence is requested by the committee . . .
> *Fourth:* Between (*a*) the negotiating committee of the union and, if desired, a representative of the International Union, and its attorney, in all not to exceed eight (8) persons, and (*b*) the representatives of the management . . .
>
> SECTION 2. Should a grievance not be settled in the regular grievance procedure, all data shall be submitted to a committee consisting of two executives of the company and two official representatives of the union. Final disposition of the grievance shall be made within fifteen (15) days. Should this committee not be able to reach an agreement, the grievance shall be submitted for final determination to an arbitrator . . .

Another example of machinery for resolving grievances was provided by the following agreement between Botany Mills, Inc., and the Textile Workers Union of America, CIO. These two organizations have conducted jointly an extensive training pro-

[1] Adapted from "Management Almanac," National Industrial Conference Board, New York, p. 126, 1945.

gram in human relations for supervisors and union stewards and officers. The quotations below are taken from the excellent report, "The Botany Plan," in the section dealing with grievance procedure.[2]

> Good faith, confidence in each other, a cooperative spirit, and mutual respect are necessary in settling grievances to the mutual satisfaction of the company, its employees, and the union. Honesty of intent and the belief that plant problems are matters of mutual concern are more important than the strict language of the agreement. Responsibility on both sides is indispensable. A grievance procedure is no better than the men—company and union representatives—who operate it. This is equally true of all industrial and employee relations.
>
> . . . The contract . . . provides [that]: Should an employee have any grievance, an earnest effort shall be made to adjust such grievance immediately in the following manner [see page 352]:

Union-Management Cooperation

In settling grievances, the supervisor, of necessity, will have many conferences with shop stewards and other union representatives. The shop steward has been elected by his fellow workers to represent them, and the settlement of grievance is one of his principal duties. But the supervisor cannot delegate his responsibilities to a union officer, nor can the steward assume the supervisor's duties. However, each has certain common responsibilities in grievance procedure. One responsibility is to prevent grievances from ever occurring; another is to get the facts about the grievances; and a third is to do what they can to avoid work stoppages which interfere with production. Neither supervisor nor steward is expected to surrender his authority; but as employees of the company both have responsibilities affecting the welfare of the entire organization, and so they should work harmoniously together.

[2] "The Botany Plan," pp. 68–69, Botany Mills, Inc., Passaic, N.J., 1948.

Steps	*Participants*	*Days allowed for adjustment*	*Remarks*
1	Aggrieved employees Shop steward Immediate supervisor in aggrieved employee's department	1	Grievance considered orally
2	Shop steward Overseer (foreman)	2	Grievance in writing and nature stated fully and completely
3	Shop chairman Superintendent of division	1	The business agent has right to appear at any step in the grievance procedure
4	Business agent of union Director of labor relations	7	
5	Personal representative of president of Botany Personal representative of president of national organization of the union Director of industrial relations Business manager of union now designated	7	If grievance is not adjusted within 7 days under step 5, either party may demand arbitration therefor before the permanent arbitrator

Ordinarily, the grievance procedure begins with the shop steward's request that a supervisor take some action for an aggrieved employee whom the steward represents. Proper procedure dictates that the steward should get all the facts before he complains to the supervisor. He should not hesitate to ask the supervisor for information concerning the case before presenting the grievance. This is usually essential, since the aggrieved worker states only his side of the story. It is always better for the steward to discover discrepancies or mistakes through his own efforts than to be apprised of them by the supervisor after he has lodged his complaint. If the steward determines that there is no valid reason for the worker's dissatisfaction, it is his duty to tell him so and withdraw the case. Insistence on consideration of unfounded grievances only weakens the steward's position and undermines morale.

If, however, the steward is convinced that the grievance is justified, he and the worker should present the facts, as they understand them, to the supervisor. They are entitled to full hearing and consideration from company representatives. Whether the grievance is granted or denied, the reasons for management's action should be clearly stated, to avoid the impression of arbitrary action and to secure confidence in its judgment.

One of the greatest contributions to industrial peace that the supervisor can make is to *prevent* grievances from occurring. He can avoid many of them if he has established the proper working relationship with union representatives. Even though their tactics and motives may seem very trying, the supervisor must remember that union representatives have legitimate functions to perform. They are human too and have a special job to do. Settlement of grievances justly, through harmonious consideration of management and union, adds prestige to both. It helps to establish leadership and strengthens mutual confidence.

QUESTIONS FOR DISCUSSION

1. What is the difference between a complaint and a grievance?
2. What is the role of the first-line supervisor in the settling of grievances?
3. What are the steps the supervisor should take in dealing successfully with grievances?
4. The cause of grievances can always be found in the work situation. Discuss this statement.
5. Give an illustration from your own experience of (1) dealing successfully with a grievance and (2) dealing unsuccessfully with a grievance.
6. What is to be gained by having the aggrieved employee restate his complaint?
7. Relate the informal to the formal machinery for the settling of grievances.

THIRTEEN

The Supervisor Counsels the Worker

"Boss, you gotta do something about that broken window."

Abe Schwartz is talking to his supervisor, Hal Long. As Hal listens, Abe continues to list all the reasons why the window must be fixed, and fixed immediately. The window in question is in a hallway around the corner and out of sight of Abe's bench.

Abe goes into great detail, telling how the wind is constantly blowing down his back. He attributes three colds to this same broken window, even though Hal noted that two of the colds occurred before the window had been broken. Abe's latest complaint was a backache, which again he blames on the window. All of this would have been natural enough and ordinary enough, except for one little fact—the window had been replaced on the afternoon of the previous day. Abe simply hadn't noticed it, but it didn't stop his complaints.

Understandably, Hal took a great deal of pleasure in pointing out that the window had already been repaired. But fortunately he wasn't malicious about it, nor did he try to rub it in. Abe didn't appear at all taken aback by the inconsistency of his complaint. He simply shifted his ground and referred vaguely to some other conditions in the workshop. That's the way Abe was

and Hal knew it. Abe always had something to gripe about. He always rebelled at the slightest injustice and he could always find fault with company policies.

Hal wished that he knew what to do about Abe and how to handle him. In spite of his faults, Abe was an excellent worker. Had the window actually been broken at the time of Abe's complaint, Abe's trouble might legitimately have been attributed to the draft through the window. Only rarely does a supervisor spot a complaint so completely unjustified as the one Abe mistakenly had made. Be that as it may, many such complaints—perhaps the majority—are not directed against the obvious physical condition mentioned in the complaint. Many personal factors are involved. Viewed in this manner, those complaints are not fit subjects for grievance machinery but, rather, are matters for the counselor.

Whether Hal Long knows it or not, he is in a counseling situation. To be sure, Hal never has thought of himself as a counselor, nor indeed have many other supervisors; yet actually, much of the supervisor's time is spent in what might be called counseling situations.

WHAT DO WE MEAN BY COUNSELING?

We shall develop our specific meaning of the term "counseling" as we go along, but briefly here is what is implied by the term. Counseling occurs when one person who is troubled by a personal problem brings that problem to another in the hopes that a solution will be found. The term "personal problem" as used here is somewhat broader than the ordinary understanding of this term. It includes all our problems, excepting those which are purely technological in nature or whose solution lies strictly in the realm of fact. A problem is considered personal when it involves such

considerations as: "Which is better for me . . . I am terribly worried about . . . I am sick and tired of this situation . . . This is the most boring job I've ever had . . ."

The common ways in which the individual with a personal problem begins to talk about that problem could be listed endlessly. You are dealing with personal problems when you discover that in the discussion of the situation the person relating it brings out his feelings, desires, hopes, fears, and emotions. Abe's emotional complaint to Hal was a clear tip-off that there was a large personal element in Abe's problem. Had Abe simply said, "Hal, I don't know whether you've noticed it or not, but the window there has been broken for about three weeks now. What are the chances of getting it fixed before I freeze to death?" this fairly straightforward statement of fact would have indicated relatively little personal involvement. On the surface at least, nothing here makes this appear to be a counseling situation.

In our definition we said that the counseling situation implies not only a personal problem, but also the hope on the part of the individual that he will find a solution to his problem. That hope may not be clearly thought out; certainly it is not necessarily an expectation that the solution of the problem will be found. If the person goes to a professional counselor, be it a minister, psychiatrist, psychologist, or some other person of professional standing, the hope for release from the problem is clear-cut. On the other hand, if the problem is called to the attention of a friend, relative, supervisor, or some other individual who makes no claim to being expert in the matter of personal guidance, this hope of solution to the problem may be less clearly defined on the part of the individual seeking counsel. Indeed, it is often the case that he may fail completely to recognize his own motives.

It should now be apparent from our discussion that a counseling situation need not be restricted to the office of some pro-

fessional counselor. You are in a counseling situation any time someone wants to talk to you about a problem involving his own personal feelings, hopes, desires, or fears. He may hide what he's doing even from himself. Somehow, however, he feels that relief from his tensions—if not the solution to his problem—may be gained by talking them out with someone. When we understand the problem this way, it should be clear that the foreman *cannot* ignore the problem of counseling, because he *cannot possibly avoid it.* If this is the case, then it behooves the supervisor to know something about the process of counseling and to understand what can be accomplished by it when it is efficiently and sympathetically carried out. This understanding is essential even to supervisors in those companies which have an organized staff of trained counselors, for unless they understand what may be accomplished by this process, its full benefits may not be exploited by the professional counselor.

HOW IS COUNSELING DONE?

The first thing we must understand is that there are many approaches to the problem of counseling. It is incorrect to say that one and only one method will produce results. Indeed, rarely do the proponents of any particular method of counseling ever go that far. Counseling, whether done in a business or professional situation, used to be thought of only as an advice-giving procedure. This advice-giving method, now called "directive counseling," has been challenged by a promising approach known as "nondirective counseling." We shall discuss this method here in detail. We do this, not so much because we feel that directive counseling is ineffective, but because the nondirective approach serves our purpose better in emphasizing those dynamic qualities in the individual upon which he builds his own good adjustment.

Professor Rogers, in his book, "Counseling and Psychotherapy,"

describes various approaches to counseling.[1] Some of these methods Professor Rogers condemns as being wholly useless or even harmful. Unfortunately, we find among these inadequate methods some that are very commonly used by foremen and supervisors. Among those he discusses are the following:

1. Ordering and Forbidding

Suppose that Hal Long had said to Abe Schwartz after Abe finished his complaint, "Abe, I don't know what's biting you. Sure, I had that window fixed, but tomorrow it'll be something else. I know there's something on your mind. You're worried about something, or you're afraid of something, or, most likely, you're sore about something. All I can say, Abe, is that whatever it is that's bothering you, forget about it. If you don't watch out, it's going to start to interfere with your work. I can see that it's already started to interfere with your happiness. Just let me warn you, Abe, you'd better forget about it before things get a lot worse."

Here Hal has made a shrewd observation. He figures that something besides a broken window is bothering Abe. Having made that deduction and being certain of its truth, he then sets about to solve the problem in a forthright manner. He simply tells Abe that he knows there's something besides broken windows on Abe's mind and, whether Abe knows it or not, he had better get rid of it. Had Hal done this, he undoubtedly would have done more harm than good. Worries are not spirits that can be exorcised by magic words. The solutions to emotional problems are not logical in the ordinary sense of the word. These solutions are often slow in coming, even when the intellect understands exactly the source of difficulty; even then, solutions must await emotional imponderables.

[1] Carl R. Rogers, "Counseling and Psychotherapy," pp. 20*ff.*, Houghton Mifflin Company, Boston, 1942.

2. Exhortation

Here is a method of counseling that is probably less widely used by foremen and supervisors than the method just discussed, but it is nonetheless a familiar one. In the use of exhortation, the person seeking help is encouraged and inspired to do better. If his problem is drunkenness, he is told about the evils of drink. He is told how he is degrading himself, and a picture is painted of how things might be if only he would give up drink. Here an effective and convincing speaker may be able to awaken the drunkard's self-respect and fill him full of determination never to touch another drop. He may even sign a pledge.

With the signed pledge in his pocket, the silver-throated counselor may congratulate himself on the good job he has done; but what happens to our friend after the inspiration of the minute wears off? You guessed it. Drunk again. If anything, he is worse off than he was before, for he has demonstrated to himself and others that he cannot even keep his word. Why should we expect the inspiration of the moment to carry through and mend a problem that was years in developing? Nowhere has he been given new and suitable habit patterns to substitute for the old inadequate ones. In most cases he has simply been sold a bill of goods. He knows already that something is wrong and he wants to correct it. Exhortation simply increases the desirability of the goal. It does not lead the individual over the rugged pathways which lead to that goal.

Exhortation is good for contests. It can help workers reach periodic production goals, but it does not correct personal maladjustment.

3. Suggestion

This is a method dear to the hearts of the amateur psychologists. As they begin to understand a little about the nature of

personal problems, they begin to have the feeling that the problems are actually not real, but rather have somehow been induced by suggestion. If this is so, then why not suggest the troubled person right out of his trouble? Such counseling takes the form of "You certainly look better today . . . My, you're certainly improving in your work . . . You look and act happier to me. You're feeling better, aren't you?"

Unfortunately, as attractive and as ingenious as this method seems to be, it just *does not work.* At times it has the appearance of success; but, as Professor Rogers says, these apparent successes are likely to be very misleading. When someone continually tells you how fine and healthy you are, it is often easier to agree than to let the sad truth be known. Another essential defect in this method is that it tends to deny that any real problem exists. It pretends that there are no problems and, by implication, encourages the individual to neglect his search for substantial problem solutions.

4. Interpretation

This method is another favorite of the would-be psychoanalyst. It works on the assumption, which, incidentally, is more often than not true, that an individual may not know the source of his own personality difficulties. It further assumes that the basic cause of difficulty can be ascertained with the help of some wise and well-trained counselor. This counselor goes into all the facts of the case as they are related to him, and then he pronounces his diagnosis. Since the problem requires neither surgery nor medication, the counselor explains or interprets the diagnosis to the individual. Presumably, from that time forward, the individual understands the nature of his difficulty and immediately takes corrective steps. The method sounds deceptively simple, and it is true that in the hands of a skilled clinician it may sometimes work. But rarely does it work, if at all, when used without

other therapeutic techniques. It is certain that it is not a method that can be generally applicable.

When Sam had been late for three mornings, Hal Long, his supervisor, decided that he'd better have a lengthy talk with him. Sam hadn't been just a few minutes late; the average was over an hour. He'd been on the job for about three months, and while his rate was all right for a learner, it was still below standard production. Before talking to Sam, Hal had looked over all his production records. He learned from them that Sam had made unusually good progress during his first few weeks. Then he seemed to slack off, down to the rate of the average learner. During the past month, however, his rate had slipped considerably, and he was now producing among the bottom 10 per cent of the workers in his classification. Hal talked to Sam and learned that he was an ambitious young fellow, but apparently something had happened recently.

SAM: I don't know what the trouble is, Mr. Long. It just seems as though I can't get to sleep at night, and when morning comes, I sleep right through the alarm clock no matter what I do. I'm rooming by myself, so there's no one there to see to it that I do get up.

HAL: You just can't seem to be able to get to work on time this week. Is that it, son?

SAM: That's it. I don't know why. I like my job fine. At least, I used to. You see, it's this way. When I took this job, I thought I'd turn out more work than anybody else in the department. You know I did do well during the first few weeks. You told me so yourself. Well, somehow, I couldn't keep up that pace. I wanted to be tops, but I never could quite make it. Other fellows who didn't even appear to be trying turned out more and better work than I did. I don't know what that's got to do with my being late this week, but it's at least part of the story.

HAL: Sam, I think it's more than part of the story. I think it's the whole story. You started out with high ambition. You had a definite goal before you. Unfortunately, you were unable to reach that goal. Then what happened? Since you couldn't do as well as you thought you ought to be able to do, even though you were doing fine by our standards, you became discouraged, you began to dislike the job, to give up, even to quit. Somehow you don't get satisfaction out of your work any more, because you can't satisfy your own standards, even though you can satisfy ours. Now the situation's gotten so bad that you've actually started to run away from the job. You can't let yourself come right out and quit, but I think you'd really like it if we'd fire you. Your oversleeping and being late for work is just a part of the picture. Well, we won't fire you, Sam. Not right now. Do you understand what I'm driving at?

SAM: Yeah, I guess you're right. That's probably how it is with me. I'll try to do better.

Hal's interpretation was probably right in Sam's case, but did he do any good to explain it to Sam and there let the matter drop? Was that sufficient to help Sam through to a solution of his problem? It apparently wasn't, because the next week Sam stayed away from work altogether. Hal had to assume that he quit, because he never saw him again after that.

Interpretations of the motives behind other people's problems may be interesting as gossip, but don't interject them into the counseling situation. Most likely they are incorrect and almost always they are presumptuous. If interpretation is a helpful tool in the hands of the psychoanalyst, let it remain there; don't borrow it from him.

Explanations Sometimes Do Harm. Unfortunately, most people in supervisory positions almost habitually evaluate the actions of others in terms of their own pat interpretations and explanations.

We say "unfortunately" for two reasons: (1) because the explanations are usually either wrong or too superficial and (2) because the supervisor who does the explaining believes implicitly in his theory.

You don't have to search far for examples of superficial behavior explanations. Joe is lazy . . . Tom is a grouch . . . Ed is happy-go-lucky . . . Bill's a crook . . . John's a saint . . . Whenever you hear behavior explained in terms similar to the foregoing, you are listening to what is at best superficial behavior explanation. At its worst, it is not only wrong but tends to stifle any attempt to alter the behavior in question for the better.

Each of the above "explanations" describes a host of different behavior patterns which, though similar in form, may result from many different predisposing causes. Take the word "lazy," for example. According to the dictionary, "lazy" means simply "adverse to labor." Name one of us who isn't "adverse to labor." We may differ in the kinds of labor we don't like or in our capacity to continue doing labor we do like or in the amount of time we like to sleep, etc. Nevertheless, the term "lazy" is applied only to certain people. Now if we exclude the possibility that sickness is involved, unwillingness to work must be accounted for on the basis of the motivational pattern of the individual.

Simply to say that a man is lazy is no explanation. Explanation and interpretation of his avoidance of work must take the form of the total personality of the individual in a particular work situation. Behind the apparent laziness may be frustrated ambition because of lack of education or training, feelings that the pay for the job is insufficient, feelings of inadequacy because of inability to get along with fellow workers. We could go on almost indefinitely listing these possible causes behind the superficial "cause."

Because interpretation is a dangerous and double-edged weapon, it is best that the supervisor restrain himself when tempted to use it. In most cases, behavior interpretation will do

the worker seeking help little good, and it may leave the supervisor who uses it with a convincing but erroneous impression that he now knows how to deal with this particular worker.

5. Advice

The words "counselor" and "adviser" are often used interchangeably, so closely has the function of counseling become identified with this particular method of counseling, namely, "advising." Popular radio shows have been built upon the idea that personal problems are solved by sound advice. In the soap operas, some sage, elderly person briefly sums up the situation, mouths his meaningless advice, and thereby patches up a wrecked personality. It is just this concept which makes foremen and supervisors feel insecure and hesitant about discussing personal problems of employees. The concept of the counselor as an adviser leads one to think of the counseling situation as a logical and systematic thing. The reading of our earlier chapters, however, should have dispelled the notion that human behavior and human problems follow any *superficially* logical pattern.

A person seeking help seems to want something definite, a clear-cut solution to his problem. He wants the counselor to lay out a path for him to follow. Perhaps you've had this experience. A worker comes to you all wrought-up about a particular problem. He explains it in detail and then asks you what he should do. As you listen, you are formulating ideas about the best course of action he should take, so you tell him just what you think he should do. But as you tell him, you note that he scarcely listens to you. He seems impatient that you have interrupted him in order to answer his question. You finally end up by being completely confused about why you were asked for advice, when apparently your advice was neither wanted nor listened to.

There are several reasons why the giving of advice so often fails, but basically the inadequacy of this method of counseling

stems from the fact that personal problems are, just as the term implies, deeply personal. That being the case, they must be worked out personally. The counselor is on the *outside,* and his intervention in working out the problem solution may hinder as well as help. But regardless of what the counselor does, those who have the problems must work them out for themselves. The counselor, as we shall try to make more clear in the next section, serves his function best if he provides an atmosphere in which the person being counseled can work out his own problem solutions.

Perhaps one of the greatest travesties, or we might even say burlesques if the results were not so tragic, on counseling is being carried out by those network radio shows which capitalize on the need of some unfortunates for help. In one such program, three distinguished guests are invited to sit with the adviser and to decide what should be done in the various cases brought before the panel. Usually, three cases are presented in half an hour. The advice is given, and the person is sent on his unhappy way. The very existence of this atrocious program depends upon a commonly held but erroneous notion that personal problems are solved by the astute advice given by the counselor; that they are solved because somehow the counselor *knows best*; that they are solved because a good counselor knows how to insinuate himself into the personal life of the counselee in a matter of minutes, ferret out the difficulty, and propose the solution. If the solution is not forthcoming, it is not the method which is criticized, but, rather, the adviser. Had he known more, had he seen more clearly, he could have proposed a more adequate solution. Failure, however, should be blamed less upon the quality of the advice than upon the use of a method which requires that advice be given.

Advising is popular because of yet another reason. The person seeking advice hopes wholeheartedly that it will work. The adviser affords him tremendous relief, because upon the adviser's shoulders is heaped the responsibility for the correction of the

difficulty. Unfortunately, this cannot be the case. Personal problems remain personal. Solutions must be worked out by the individual, and it is often an extremely difficult job.

Counseling and the Supervisor

What then is the job of the counselor? What are the most effective methods he can use? And, finally, can the supervisor learn to use these methods? From our point of view, the answer to the first question is this: It is the counselor's job to provide a situation in which the person seeking counsel can work out the solution of his problem. More needs to be said on this point, and we will develop it in a moment; but first, let's attempt to answer the question of method. Any method which is effective in helping the counselor do the job as we have described it is a good method. We have described some of the difficulties and dangers of certain methods. In skilled hands and under certain circumstances, perhaps each of these may be effective, but our answer to this question is contingent upon our answer to the third question posed above: Can the supervisor learn to use the counselor's methods? We think that he can, but the dual role is difficult. Be that as it may, it is our feeling that if the supervisor were to interject more of the counseling attitude into his supervision, a much more effective job of supervising could be done. Perhaps we are not advocating, in reality, a double role, but, rather, that any supervisory position has much in common with the position of the counselor. In that respect, all the things that we discuss in this book are designed to make an individual both a better supervisor and a better counselor.

Let's go back to our first question. The counselor's job is to provide a situation in which the person seeking counsel *can work out his own problem.* Just what kind of situation is this? In the first place, it is a social situation. Two people are involved. Granting this point, something needs to be said about the relation-

ship between the counselor and the counselee. The counselee needs to feel that he can have complete trust in the counselor. He needs to feel that the counselor will never knowingly do him harm and will certainly never betray his confidences. It is at just this point that, in the eyes of the employee seeking counsel, the supervisor either must play a dual role, or the relationship between the supervisor and employee must be one of a mutually understood reservation. In the final analysis, the supervisor does represent management. In fact, he *is* management to the employee. Consequently, if the problem being discussed with the supervisor bears on employer-employee relationships, the ideal degree of confidence between counselor and counselee is difficult, perhaps even impossible, to achieve.

THE NONDIRECTIVE APPROACH TO COUNSELING

All the methods of counseling discussed above are based wholly or in part upon the idea that the counselee needs some outside direction and guidance to set him on the right track. However, many counselors have noted that even when they apparently gave no advice, made no suggestions, didn't warn or order, in fact, when they apparently did nothing but listen and understand what was being told them, many problems just seemed to clear up. Repeated experiences of this kind led one large industrial organization, the Western Electric Company, to try this listening, understanding method of counseling on a large scale. This daring and revolutionary approach was adopted and has since become the accepted approach to counseling in this company. Let us look at how an actual problem might be handled by this method.

An Illustration

A young widow asked to see the counselor in her department. She was very much agitated when she requested the interview.

She explained to the counselor that she just had to find an apartment for herself and her young son. If she did not find a place within the next month, she was in danger of being evicted. The problem was complicated by the fact that she did not want to leave her present neighborhood, because there she had made adequate arrangements for her child's care while she was at work. It was explained to her that the counselor could do nothing about finding another apartment. The young widow replied that she understood this and that she also knew that the *personnel* department was set up to offer some direct assistance in this matter; but she insisted that she wanted to talk it over with her own department counselor. Permission was secured from the supervisor for her to take time off to confer with the counselor in a near-by counseling room.

Mary, the young widow, began to complain bitterly to Mrs. Williams, the counselor, just as soon as they entered the door. She explained the miserable situation she was in. She was deeply grieved at her husband's death and was darkly suspicious of the quality of care that had been given him in his final illness. She spoke openly of her resentment toward the landlord who was forcing her to move. In short, there was nothing good in the world. Mrs. Williams did nothing to interrupt her outflow. In fact, she had little opportunity to do so. She did, however, listen intently, sometimes simply nodding her head, indicating that she understood. When Mary said, "Sometimes I could almost kill that landlord when I think of how I've slaved fixing up that house, spending some of my own money for repairs that he ought to have had done, and now to treat me like this—I'm so hurt, mad, that I—I—just don't know what I'll do."

Mrs. Williams' response to this was, "You feel that you've been very unjustly treated, so very badly treated that it almost hurts to think about it."

"That's it exactly . . . ," was Mary's reply.

THE COUNSELOR'S ROLE

Mrs. Williams was much more interested in the way Mary felt about her situation than about the facts in the case. She didn't concern herself about who was right or who was wrong. She tried simply to grasp Mary's feelings and to let Mary know that she did understand them.

Nor was Mrs. Williams concerned about Mary's past history. She wanted simply to know and to understand what kind of experiences Mary was undergoing right now in the counseling situation. As she listened she concentrated upon the present. She was not listening with one ear and trying to plan just what course of action she should recommnd to Mary.

At the end of the hour the problem appeared to be no nearer solution, at least to the untrained observer, than it had been when Mary began to talk. Mary, however, thanked Mrs. Williams, and said she thought she'd been helped a lot. Indeed, her expression of gratitude was not simply a conventional statement of thanks. She really felt that she had been helped, and she felt that Mrs. Williams had done a great deal for her. Furthermore, she asked to come in the next day. Mrs. Williams assured her that she could come in as often as she felt it was necessary, until her problem was worked out.

Now just what had Mrs. Williams done? Had she performed any service at all? The cynic might be inclined to say that Mrs. Williams had done nothing except consume an hour of the company's time with an emotional woman. Actually, however, a direct attack was being made at the heart of this problem. Whatever was to be done about Mary's housing problem ideally should be done only in the light of Mary's emotional state. In one sense, Mrs. Williams had not insisted upon being logical and forcing Mary into strait-jacketed thinking about her problem of housing.

Rather, she had provided a *social situation* in which Mary could get at the root of her own emotional problems. This first session was not particularly constructive, but it did lay the groundwork for the constructive action that did follow. As is typically the case, Mary had used the initial part of her counseling interview as an opportunity to give vent to her feelings of hostility. She did a good job of it, too!

Expressions of Hostility in the Counseling Situation

What was Mrs. Williams' function here? In reality, she was allowing Mary to take out these hostile feelings; to examine them; to repeat them; to express, in words, hostile acts about which she would never allow herself to think. Think of this in terms of our earlier discussion of frustration. Mary was frustrated, not only by the immediate situation, but by other things as well. These frustrations lead to aggressive tendencies. Under ordinary circumstances and in ordinary social contacts, these tendencies towards aggression must be suppressed. The suppression of these feelings is in itself frustrating, and a vicious circle begins. Constructive thinking cannot occur in such an emotional jungle.

In the counseling situation, Mary finds herself free to release these feelings of hostility. Furthermore, Mrs. Williams does not in any way attempt to stanch the hostile flow, thereby creating new frustrations. On the other hand, she by no means sides with Mary's attitude. She does not accept these statements of hostility as facts. She does not indicate that she is sympathetic to them. Rather, she leaves with Mary the impression that she *understands* these feelings and that in no wise is Mary's expression of them ever to become a threat to Mary's security. In this counseling situation the emotional atmosphere has been at least partially cleared. The next day, Mary comes in again to see Mrs. Williams, but this time she is less agitated and is more calm. She recognizes

that she had made some harsh statements on the previous day. To some extent she continues to justify them; but, on the other hand, she speaks with considerably more moderation.

Signs of Progress

Mary indicates that she has been thinking about the problem but has made no real progress in finding a new home. Toward the end of the interview, she introduces a previously undisclosed fact. She tells Mrs. Williams that her husband's mother lives but a few blocks from her present apartment and has a house that is large enough to accommodate both of them. However, Mary has never gotten along with her mother-in-law. Again she expresses hostile feelings. The mother-in-law does not understand her. She felt that her son married beneath him. Consequently, Mary is distrustful, and feels it would be unpleasant to live in the same house with the mother-in-law. She is particularly worried, because she feels that if the child were left with the mother-in-law, while Mary was working, the mother-in-law would attempt to steal the child's affection from his mother.

Here, on the surface, is an ideal and logical solution to Mary's problem, namely, to leave her apartment and move in with the mother-in-law. This would not only solve the problem of living quarters but would also take care of the problem of a nursemaid for Mary's child. In view of strained relationships between the two, however, it is an impossible solution. It is on that note that the interview is concluded. Mrs. Williams had again refrained from giving advice and had continued her role of *listening* and, above, all, *understanding.*

Solution

There were several more interviews, during which Mary's expressions of hostility became fewer and fewer and during which she began to make certain positive gestures. For example, she

says, "I wonder if it would be as bad as I think it might be if we moved in with my mother-in-law. Tommy seems to like her; and, after all, it is such a big house."

Mrs. Williams replies, "Perhaps, then, there would be some advantages in attempting to get together with your mother-in-law."

For several days after that, Mrs. Williams did not see Mary. Then she came to see Mrs. Williams one morning, with a smile on her face and in apparent excellent spirits. "What do you think, Mrs. Williams! My problem's all settled. I got to thinking about the things we talked over and decided I had best go see John's mother (Mary's *mother-in-law*) and have it out with her. I went over to her house last night and told her that I had some things I'd like to say to her. She said she had some things to say to me too. Well, at any rate, I told her what I thought about her. I wasn't mad, you understand, but I told her how I thought she felt about me and how I felt about her. We talked for a long, long time. You know, Mrs. Williams, she's not such a bad person. I'm afraid I've wronged her. She misses John terribly. I think it would help her even more than it would help us if we move to her house. Oh, there will be problems, all right, but I think we can work them out."

Here, under the circumstances, was an ideal solution. Perhaps the results in this case are more clear-cut and more spectacular and successful than in the ordinary counseling case. Certainly Mrs. Williams deserves credit for her handling of this situation. She provided the all-important stage, and Mary did most of the acting. Mary not only learned the solution to her problem; she also learned that she had the strength and independence of thought and action to solve other problems on her own. Of course, if the occasion arises, she will go back to Mrs. Williams, but she does not feel completely dependent upon her. In this situation, a problem was solved that no amount of advice in the direction

of its eventual solution could have achieved smoothly. To have advised Mary to live with her mother-in-law would have simply been a challenge to her to present reasons why such a solution was impossible. When, however, the solution stemmed from her own thinking and from working through her own emotional problems, this was found to be a palatable answer to her problem.

COUNSELING SITUATION ANALYZED

Dr. Rogers contends that the counselee undergoes a definite growth experience during counseling. The time spent in counseling is not a time to store up advice and information to be used on later occasions. Rather, in and of itself, this counseling time is a period of growth or development. To be sure, the development does not stop at the end of the hour. On the other hand, it does not wait for the clock to strike in order to begin. Dr. Rogers lists six conditions which should be fulfilled in order for the counseling situation to become effective.[2] Mrs. Williams apparently fulfilled these conditions in her counseling of Mary.

1. Counselee Responsible for Self

First the counselor must assume that the counselee is responsible for himself. Furthermore, he should act upon this assumption by being willing that the individual remain responsible. In other words, Mrs. Williams did not accept the responsibility for Mary's plight or for her emotional attitude. In fact, when the individual begins to see and accept responsibility for himself, one of the aims of counseling has been accomplished.

2. Drive for Growth

In the second place, Dr. Rogers believes that ". . . the client has a strong drive to become mature, socially adjusted, inde-

[2] Carl R. Rogers, Significant Aspects of Client-centered Therapy, *American Psychologist*, Vol. I, No. 10, pp. 415*ff*., 1946.

pendent, productive; and he [the counselor] relies on this force, not on his own powers, for therapeutic change." It is obvious that Dr. Rogers does not view the counselor as assuming any God-like role of superiority over the destiny of his client. Rather, he insists that the counselor know and understand that basically the power of adjustment lies *within the individual* seeking help. Mrs. Williams had that much faith in Mary.

3. Permissive Atmosphere

The third point of emphasis is the kind of atmosphere created by the counselor. To this, the term "permissive" has been applied. By a permissive atmosphere is meant one in which the individual feels free of social restraint, feels free to express himself without fear of censure and without worry of consequence or misinterpretation. It is an atmosphere in which he is not forced to prove anything or to be anything other than himself. He feels free to talk or not to talk. He feels free to say or do outlandish things if he so desires. Such an atmosphere is difficult to achieve, and probably the supervisor cannot fully create such an atmosphere and still retain his supervisory position. On the other hand, it is unquestionably true that most supervisors can be considerably more permissive than they ordinarily are. Many supervisors carry their lack of permissiveness so far that actually they get no information other than the limited factual information they specifically request. *The supervisor who builds up a nonpermissive atmosphere is like a horse who puts on his own blinders. He misses a lot of relevant details in his surroundings, but what he sees neither surprises nor frightens him.*

4. Limits

The fourth point is, in effect, an amplification of the foregoing. The only limits Rogers would impose upon the counseling situation are those of normal behavior and perhaps those of time. In

no manner or form would he impose any limits on the attitudes expressed to him. In some situations, this is much more difficult to do than to talk about. It is particularly difficult to follow if the counselor has strong opinions of his own which run contrary to those expressed by the client.

5. Reflection

In the nondirective approach, we are limited to those methods during the interview which show that the counselor has a full and sincere understanding of the emotional problems of the counselee. Principal among these is that of reflection. By reflection is meant the mirroring of the client's emotionally expressed attitude. In a sense, this mirroring gives the client an opportunity of hearing his own emotionally tinged thoughts expressed by another. The words used may be different. They may, and often do, express the emotional idea more clearly than the counselee's own words. However the reflection is expressed, it serves its purpose only if it conveys to him that the counselor unquestionably understands his feelings and his idea. In reflecting an idea, the counselor neither shows approval for it nor disapproval. He shows only that he understands it and accepts it.

6. Impeding Progress

As a sixth and final point, Rogers notes that there are many things during the interview which the counselor may do, either inadvertently or by design, which will impede progress. According to him, this means that the counselor must refrain ". . . from questioning, probing, blame, interpretation, advice, suggestion, persuasion, reassurance." This may seem to be an easy rule to follow. Actually, it is not. It is particularly difficult to follow when the person being counseled pauses or ceases to talk. Just as nature seems to detest a vacuum, so do counselors and interviewers detest pauses or breaks in the interview. How easy it is to ask a

direct question to get the person going again. How easy to give advice when it's asked for, even if fundamentally it isn't wanted. How easy to reassure a person, to say that everything will be all right, and that things aren't nearly as bad as they're painted. In the nondirective counseling situation, Rogers not only says that these things are not called for, but that they may actually *interfere* with the adjustment-seeking process of the counselee.

Phases of the Counseling Process

Suppose for the moment that the experienced counselor has set up the situation exactly as described above and has skillfully carried out his function. What might we normally expect to happen? The counseling process should go through certain well-defined phases in orderly sequence. The individual seeks help of his own volition, because he himself feels that he needs it. He isn't prodded into it from the outside, or at least he shouldn't be if we are to expect beneficial results. He has come to the point in his thinking that something must be done about his problem and that somehow the participation of another individual is required, namely, the counselor.

After he is brought to an understanding of how the counseling is to proceed, he soon finds that he can express all his ideas freely and without fear of censure in the situation. This in itself is a process of learning which may not occur immediately. Some individuals may even try to test out the counselor, to see if they can talk freely. When this point is brought home clearly and forcefully to the counselee, he then can begin to work on his own personal problem in the presence of the counselor with a feeling of freedom and of complete acceptance.

Importance of Acceptance

Having one's emotional attitudes and expressions accepted is in and of itself of tremendous benefit. Think for a moment about one

of your most embarrassing experiences, preferably one that happened some time ago. Do you recall the relief you experienced when you finally got up courage enough to tell it to somebody else? You could even laugh about it; and the more you talked about it, the less it seemed to bother you. Why this reduction in feeling tone? While an involved psychological explanation could be given, in short, the answer hinges upon the fact that the experience as you related it was in some measure *relived* by you. The one difference would be, however, that now as you went through it again, the person to whom you told it accepted you for the kind of person that you believed yourself to be. You were able, as a result, to relive the experience without the same harsh consequences you probably experienced as you underwent it originally. The counselor serves this same very important function for his client. The client can bring out any or all of the emotionally charged ideas and thoughts that he has held. He expresses them and finds that they are accepted. Because of this acceptance, they can be examined, manipulated, and ultimately discharged of much of their emotional content. As a matter of fact, the counselor aids in the clarification of these negative feelings.

After this initial negative discharge, the way is cleared for problem solution and we begin to see the first faint positive impulses peeping through. After getting out all the reasons and all the feelings about why and how he has been mistreated on the job, the employee says, "Well, maybe I have exaggerated a little bit. It may not be quite as bad as I have said, but believe me, it isn't good." This is a good sign, a positive sign that the process of rational self-examination has begun. Perhaps feebly, but it has, nevertheless, begun.

The counselor accepts these positive expressions in the same way that he accepted and attempted to understand the negative ones. While he personally may greet it as an encouraging sign, he does not attempt to convey that feeling to the counselee.

As the counseling process continues, the counselee begins to understand himself more and more. He begins to get insight into the reasons behind his behavior and behind his problem. Furthermore, the acceptance of the counselor becomes contagious; and feelings of self-acceptance gradually grow within the individual. After all, if someone else accepts him as he is, why should he not accept himself? Upon this broad base of self-acceptance, plans for action can be made, decisions formed, and future courses charted. As the process continues and develops, the individual begins to put some of his plans and decisions into action. Then, having run the course this far, having rid himself of troublesome emotional appendages, having begun to accept himself as he is and to take positive action about his difficulties, the individual begins to feel more and more independent. With the independence, he feels less need for help; and in this fashion the counseling relationship is ideally terminated.

How the Supervisor Can Profit from the Counseling Attitude

In the foregoing discussion we have presented what seem to be steps and points which the counselor must follow as though he is following some sort of rule book. In an actual counseling situation, this is not the case. One of the writers was introducing an experienced counselor to a group of business people. In so doing, he referred to his counseling *techniques.* The counselor was quick to correct him. He said he was not going to talk about techniques, but rather about attitudes, or even a way of life or a way of thinking. That is what this counselor thought about his work. He didn't say, "Now I must do this," or, "I must remember not to do that." Rather, he took into the counseling situation an attitude, or you might even say, a kind of personality. The things he did thereafter were conditioned by this attitude, this way of feeling and

thinking. Here are the basic elements in that attitude that every supervisor would do well to consider.

The approach to counseling that we have been discussing above is sometimes called "counselee-centered." That's an interesting word; and it means simply that the counselor, while he is with his counselee, centers all his attention upon the counselee. It means that every move he makes is undertaken so that he may understand more and more about the counselee and his problems. It means further that the counselor will in large measure forget himself. He will not try to use the counseling situation to build up his own prestige. He will not try to be clever in his diagnosis. He will not try to give brilliant advice which shows more of his own astuteness than it does understanding and concern for the counselee. He certainly will *never* concern himself with what the person thinks of him, excepting as it may bear upon the problems at hand. It is the approach that only a self-confident individual can follow.

The supervisor, in dealing with problems of his employee, can certainly take this page from the counselor's book. In other words, as he deals with employee problems, the wise supervisor is *employee-centered.* He is secure enough in his own position that he does not have to make a display or show of brilliance to his employees. He concentrates, rather, on the employee who presents the problem. He thinks in terms of developing the worker rather than in terms of promoting himself. The supervisor who follows this course of action and who develops this employee-centered attitude may not be immediately recognized for his exceptional worth, but in the long run such recognition is inevitable.

Another cue that the supervisor can take from the counselor lies in the centering of attention upon the emotional aspects of the situation rather than upon the mere words that are said and the mere deeds that are done. A skilled counselor, after giving a

talk that was not completely accepted by his audience, asked if there were any questions. Several questions were put to him that were phrased in such a way as to show the asker's definite disagreement with the ideas expressed in the talk. They were, in fact, statements of feeling rather than sincere efforts at gaining information. Instead of answering the question, and perhaps fomenting an embarrassing argument, the speaker merely said, "You feel, then, that the point of view expressed in my talk does not adequately account for the facts you mention." Without pause, he then went on to the next question.

The counselor was asked later why he handled these questions in this fashion. His answer was this: "It was quite obvious that the questioner was not seeking facts. He was simply expressing the emotional disapproval he felt. Nothing that I could have said would have changed his point of view, because he was seeking neither information nor facts. I could not agree with him, and under the circumstances, I could not get him to agree with me; but I could understand at least that he felt differently than I do on this matter, and I could accept the fact that our opinions differed. In my answer to him, therefore, I wanted at the moment only to show understanding and acceptance—acceptance of the fact that we differed in point of view, that is, not acceptance in the sense of approval of his position."

There are many times when the supervisor must deal with emotionally charged people. One of the biggest errors in supervision that he can commit is to become overcharged himself. He won't do so if he follows the advice of this counselor. Under the circumstances, best practice is to accept the emotional situation for what it is and refuse to participate in the generation of more emotion. Good supervision, like good counseling, depends upon the ability of the supervisor to recognize and respond to the emotional aspects of the situation.

Can the Supervisor Be a Counselor?

No simple "yes" or "no" answer can be given to the question of whether the supervisor can be a counselor. As intimated in the foregoing sections, the supervisor can profit by adopting some of the attitudes and methods of the counselor. On the other hand, because the supervisor has authority, it is difficult for him to create in any clear-cut fashion the necessary permissive atmosphere of the counselor's office. As we have said before, he can, and should, be more permissive than he often is, but too often the barrier of authority will be between him and the employee. On the other hand, the foreman or supervisor, because of his position, is asked to serve as a counselor by employees. Often the problems are those in which the supervisor's authoritarian role has small bearing or little relationship.

Stella, a middle-aged woman, had always had a good record as a clerical worker. Her production was good, and her level of accuracy high. Recently her good record had been tarnished a bit by a few errors, but nothing of tremendous consequence. She was much more aware of her shortcomings, however, than her supervisor, Mr. Bissell, had thought. When he had mentioned the errors to her, somewhat casually, certainly with no intention of strong disapproval, she showed considerable agitation and asked if she might not see him in private. He agreed immediately and they went to his office. He offered her a seat but she preferred to stand. Tears came to her eyes, and she began to apologize for her poor work. It was obvious to Mr. Bissell that she was trying to say more than this and was trying to give him an adequate explanation for her difficulty.

Mr. Bissell wisely refrained from questioning her or from pressing her at all. He simply sat and listened intently, indicating his understanding by a nod of the head or by an occasional clarification and restatement of what Stella was saying. She was entirely

too emotional for his comfort and liking, but nonetheless he gave no sign of any disturbance on his part.

In substance, the story told by Stella was this: she had been divorced some years previously, but she had managed to support herself and her young daughter with the money she earned plus a small alimony payment from her husband. She had recently gathered some evidence, however, which made her suspect that her former husband was in a considerably better financial position than she had ever been led to believe. She appealed to Mr. Bissell for legal advice. She said she could no longer trust her lawyers nor anyone else who had been associated with the case. She felt that she had been cheated by all of them. She repeatedly asked Mr. Bissell just what she should do. He gathered from her that she understood he was not a lawyer and that he could not give legal advice; yet she repeatedly asked him for this kind of help. Mr. Bissell made a few attempts to answer her to the effect that he would help her find a good lawyer. He noted, however, that she was not in the least bit interested in his advice, or at least so it appeared. He wisely then refrained from saying more along that line but continued for the remainder of the hour to listen, to understand, to clarify, to reflect the ideas that she gave him.

Stella's agitation, which had mounted to embarrassing heights during the interview, began to calm down. Her eyes were red from tears and her make-up was pretty well shattered; but, in spite of that, she was beginning to regain her composure. When Stella was ready to leave his office, she had not really solved her problem. She had, however, taken the first step. She had expressed her hostilities violently and without restraint in an understanding and permissive atmosphere. Mr. Bissell had shown understanding and acceptance. Whether he approved or not was concealed. As a matter of fact, he never did decide whether he approved or disapproved, because he just wasn't thinking along

those lines. As Stella talked, he had been trying to understand, not trying to judge. The thing that surprised him most, however, was Stella's statement as she left.

"Mr. Bissell," she said, "I'll never be able to thank you enough. You've helped me much more than I can say."

Stella meant it, too, for Mr. Bissell had helped. As they had talked together, it was not supervisor to employee. Rather, it was a counselor-counselee relationship.

Situations such as this arise in every office or shop. Perhaps not often, but they do arise. When they do occur, the supervisor will do well to do as little and as much as did Mr. Bissell. Under these circumstances, the supervisor could be nondirective. He could provide a permissive atmosphere. With other problems and under other circumstances, it may be more difficult, if not completely impossible.

Certainly, in many of his capacities, the nature of supervisory responsibilities forbids the supervisor to be nondirective. When he is giving orders, interpreting policies, outlining plans, assigning work, undertaking disciplinary action, he cannot be nondirective. He can, however, in all these circumstances, try to develop the counselor's understanding of the people with whom he is dealing.

Perhaps it would be well for the supervisor to examine carefully the underlying principle stressed by Rogers in the nondirective method of counseling, namely, that the counselor must have faith in the individual's capacity for growth and development. In other words, it is not the counselor who straightens out the problems in a man's personality; *it is the man himself.* Supervisors often pride themselves on their achievements in developing men. Those who have made the best record in this respect recognize that they, as supervisors, did not really develop the men. What they did do was to provide the kind of situation and the kind of opportunities in which men may develop themselves. We need

not quibble about words, for the supervisor who provides such an atmosphere for development may claim with pride that he has indeed developed men. Those supervisors, too, are characterized by the faith they have in the capacity of their workers to do their jobs and to function as a part of the work community.

In summary, in this chapter we have tried to present some of the current viewpoints on the methods of counseling. In doing so, we presented largely the viewpoint of nondirective counseling. This was done, not only because many industrial organizations which have established counseling centers for their employees have tended to adopt this method, but also because in describing nondirective counseling, certain principles of behavior important to the supervisor could be illustrated. It is not our intention to make the supervisor a counselor, but, rather, to give him some appreciation and insight in counseling methodology so that he may apply it where appropriate.

QUESTIONS FOR DISCUSSION

1. In your opinion, can the supervisor serve effectively as a counselor?
2. List and illustrate from your own experience the various counseling devices described by Professor Rogers.
3. What is meant by nondirective counseling?
4. When the worker becomes angry in the counseling situation, to what extent, if any, should the counselor attempt to control this show of emotion?
5. Analyze the counseling situation in your own terms.
6. Should "advice giving" ever be permitted in the counseling situation?
7. What is meant by the statement, "The wise supervisor is employee-centered"?

FOURTEEN

Your Own Personal Development

Supervisors are men of action. The very nature of their work demands it. It is rather rare to find one who is a profound scholar or much of a reader, for that matter. Many have worked hard in the rough school of experience to learn the technical side of their jobs. They are eager for advancement, and this brings keen rivalry for promotion. Certainly all of them can't become works managers or company presidents. Some few will make the grade but only with great effort for personal improvement and with ever-broadening education.

Schooling or Education?

Maybe the reason so many supervisors don't systematically and actively try to improve themselves is that they feel it is too late. Some feel that they don't have the ability. These so-called reasons are false in nearly every case. And part of the blame may be placed on our public school system. On graduation from grammar school, high school, or even college, a diploma is given. This seems to say to many of us, "Now you are crammed full of knowledge; go out into the world and use it. You're all through; you're on your own." In many schools the learning process has been distasteful. Students were practically *forced* to study, forced to read

books. So it became an arduous task. Study and reading were looked upon as nasty chores to have over and done with as quickly as possible. Students confuse schooling with education. Many don't learn until years after they finish school that schooling is only a part of education, not a substitute for it. The ideas presented in school offered a wonderful opportunity to master the facts and methods of successful living. Instead of being a punishment, studying might have been a challenge to learn from the stored-up treasures of the minds of the past and might thus have presented a great opportunity for self-development.

A broader view would be to think of our early school life as the preliminary to our education, as a time when the basic principles and facts were fed to us in easy doses to provide us with essential tools to solve the more complicated and interesting problems of work and living. Thus, our schooling is only a foundation for the real education which should continue throughout our lives.

How About the Old Dog?

"You can't teach an old dog new tricks." Here is one of the most damaging and erroneous statements ever made. It has caused countless thousands to give up, to cease trying, to make no further efforts for self-improvement. It provides the excuse for the lazy and slothful. It is entirely false. It has been disproved by research in the laboratory and through the example of millions who have wrought miracles of self-improvement in old age. What are the facts? We know that the rate of our learning depends partly on how much intelligence we have. It is true that there are great individual differences in intelligence or the capacity to learn. Some few people are endowed with superior intellects, so that learning is relatively easy for them. Others, in fact most people, must put out more effort. The ceilings or limits of our learning capacity or intelligence are probably determined by

heredity. It is doubtful, however, whether anybody ever has succeeded in developing his mental capacity up to his top limits. Yet, it is amazing how comprehensive can be the knowledge of the man with only average intelligence who consistently continues his education. No, we can't excuse ourselves by saying we haven't the brains. Men cannot be even moderately successful as supervisors in business and industry today unless they have at least average intellectual capacity. It was because top management recognized that they do have just such ability, such capacity for mental growth, that they were picked to be supervisors in the first place. So in 99 cases out of 100, it isn't because the supervisor lacks intelligence that he fails to continue his education.

Intelligence grows and is mature when the average person is about 16 years old. In other words, at about high school age the average person has his fully developed mental capacity with which to learn. It is very fortunate that we have this fully grown intelligence so early in life, since we are thereby provided with a mature power with which to tackle the tougher problems we encounter. We know now that there is no lessening of the ability to learn in later life unless senility has set in. And senility, if it depletes us at all, rarely takes place until well after retirement age. There is a slight slowing down of the learning process which occurs usually at about age 45. However, a healthy older person usually learns as well as when he was younger, because he brings to bear on his new problem his fully matured intellectual powers as well as a great deal of practical experience from which he can make comparisons and draw conclusions. It is true that after we are out of the habit of studying in school, of reading, listening to lectures, or preparing lesson projects, it is hard to get back in the stride again. This takes a little self-discipline. With a little persistence we can certainly get back into the learning habit. So we can teach the old dog; in fact, we can often teach him better than a young pup.

No matter how much schooling a man may have had, even if he is a college graduate and more, his education is really never finished. He goes on learning as long as he lives, unless he has started to deteriorate. We just don't stand still; we must go forward or slip backward. Any day in which we haven't learned something worth while and added to our store of useful information, we have not made progress. The opportunities for learning are immense. Each contact we have with any other person provides some opportunity. We are born with curiosity, and the man who uses it to explore his world and who gives some thought to what he has learned is adding to his mental stature. When he organizes this learning, he is educating himself.

IMPORTANCE OF GENERAL CULTURE

One of the best ways to accomplish an organized education is to read and study. In books and magazines we find stored up the best ideas of the thinkers of the world. We find there a gold mine of facts and ideas, which will not only help us to improve ourselves technically on the job, but also will greatly broaden the whole outlook on every aspect of our lives. This knowledge helps to give the insight we need to understand our world and people and to deepen our appreciation of almost everything.

Think for a moment of some of the men you know about, who are recognized for their outstanding success. How do they differ from other men? Do they have a broader view of things? Don't their minds penetrate more deeply into almost any topic they discuss? Don't they have more information than the average person on many subjects? Don't they seem to feel more keenly and express themselves more vividly? The answer to these questions is "yes." They are men who have achieved a considerably higher level of general culture than that of the average person. And how did they attain it? Certainly they were not born with it.

Most of them have read and studied regularly. They made it a daily habit to acquire facts and ideas from what they read and from other people. The men who have accomplished most are probably not geniuses at all. Most of them have been men who spent some time every day improving their education and raising their own general culture.

This general culture that a man attains is often the main thing which attracts attention to him. It makes a good impression on others. When we talk to a person who is widely read, who can discuss almost any subject intelligently, we tend to have confidence in him. We give him credit for having high intelligence. He may have no more aptitude or technical qualifications to do his job than the man who works next to him, but he is usually the man who gets the promotion. The reason for his promotion is not luck; it is that he has made a good general impression. Management has confidence in him and gives him credit, assuming that he can succeed in a more important job. And rightly so.

Now, consider some men you know who have become important executives. What sets them apart from the men down the line who report to them? We can't say that it is age and experience, because they are often younger men; nor can we be sure that they have any more brains than the others. They can't all marry the owner's daughter. It must be something else that helps them to get where they are. Sure, they work hard, but the chances are they have better tools to work with—better education. Usually they have men reporting to them who are better informed technically than they are, men who know all the minute details about the operations much better than the administrator does. But he has something they lack. He has a broad *general culture*; he is able to meet people on any ground. Usually he can get up and make a good speech; he feels self-assured because *he knows*. It is his broad general culture that helped him over the hurdles, that made the difference between his being a technician or a

rank-and-file supervisor and an executive. It makes a big difference in his salary check too. The business world is eager to pay for such knowledge, provided the person can use it intelligently. The executive and the administrator are constantly faced with new, difficult problems which require resourcefulness and imagination. The executive who has built a sound foundation through study of many fields of knowledge and who has kept abreast of the trends in politics, management, finance, science, yes, and in literature and the arts, is the man who can draw on this information to solve these complicated problems. He solves them with assurance and in a polished manner which establishes the confidence of others. But what is probably even more important, this cultured man gets a great deal more pleasure out of life. He is able to relate the things he sees and hears with the best ideas of the past. His daily life is a much more fascinating and interesting experience too. He leads a fuller life because he knows he is making a worth-while contribution.

So You Don't Have Time

It is amazing how much information and knowledge one can acquire if he is systematic about it, if he just sets aside a few minutes each and every day for that purpose. Dr. Albert Walton, professor of psychology at Pennsylvania State College and an authority on supervision and management, has this to say: [1] "Any man who is willing to devote fifteen minutes a day to the acquisition of new knowledge can secure for himself a cultural background that is superior to that given by any college course in the country. This is a statement that the lazy or indifferent man will reject with a scornful 'pfui.' When we say fifteen minutes a day, we do not mean fifteen minutes a day for six months, or six years. We mean fifteen minutes a day from now on, with no artificial

[1] Albert Walton, "New Techniques for Supervisors and Foremen," p. 180, McGraw-Hill Book Company, Inc., New York, 1940.

graduation day to put a premature end to the process. On a scheduled fifteen minutes a day, a man can learn to read any foreign language he may select; he can familiarize himself with the best books in literature, with the fundamentals of any science or philosophy, with the chief events of history and their significance. He can open up for himself new horizons and can learn to see behind and beyond the events of the day about which the ordinary man reads without real comprehension. He can attain a perspective which enables him to place these events, the men he reads about, the men he meets, in a meaningful picture. Instead of seeing them as isolated figures, he sees them in relation to others of their kind. And this is the material out of which good judgments are made."

SOME SUGGESTED SUBJECTS FOR STUDY

While the reading of any good material is worth while, consistent study of some areas or certain fields of knowledge ordinarily is more productive. This is particularly true if such reading supplements or makes up for a supervisor's personal deficiencies. All of us, no matter how learned we may be, have some weaknesses or gaps in our education. We all need to keep abreast with new developments in current thought. But we must also get information about subjects in which we are almost entirely deficient; filling in the chinks rounds out the individual. For convenience, we could divide the areas of study into technical studies and general cultural subjects. Or we might think of them as tool subjects which apply more directly to our particular work and the jobs ahead, and as material which may not seem to have so direct an application yet which will broaden the base of one's general culture. Just which subjects and what combination of them are most needed depends, of course, on the specific deficiencies and needs of each person. You can best determine what

they are by a careful review of your educational background and by getting advice from someone qualified to give sound counsel.

Technical or Tool Courses

We cannot attempt here to list all of the many subjects which might be of value. But here are a few which should be of real value to most supervisors:

- Management methods
- Mechanical and shop practice
- Labor relations
- Labor law
- Industrial psychology
- Personnel administration
- Office management
- Accounting
- Shop mathematics
- Business administration
- Statistics

Cultural Subjects

- English grammar and literature, including poetry, fiction, drama, biography
- Creative writing
- Effective speaking
- History
- Natural and biological sciences
- Economics
- Psychology
- Sociology
- Philosophy
- Art appreciation
- Music appreciation
- Languages

A balanced program of the above subjects will prove most profitable to most supervisors. As you look over the list, no doubt some of the subjects appeal to you more than others. Those that hold little appeal are very likely those with which you are not familiar. A little exploration will open up a wide new horizon and deepen your understanding. Rather than read at random through such a list, it would be better for you to get one or two authoritative, well-written books in a particular field before pro-

ceeding to the next subject. After you have read a book or two in each area, begin again and go through the list with other good books. A brief list of suggested books is given in the bibliography at the end of this chapter. In these books, as you read them, you will find references to other good books in the same and related fields.

SOURCES OF HELP AND INFORMATION

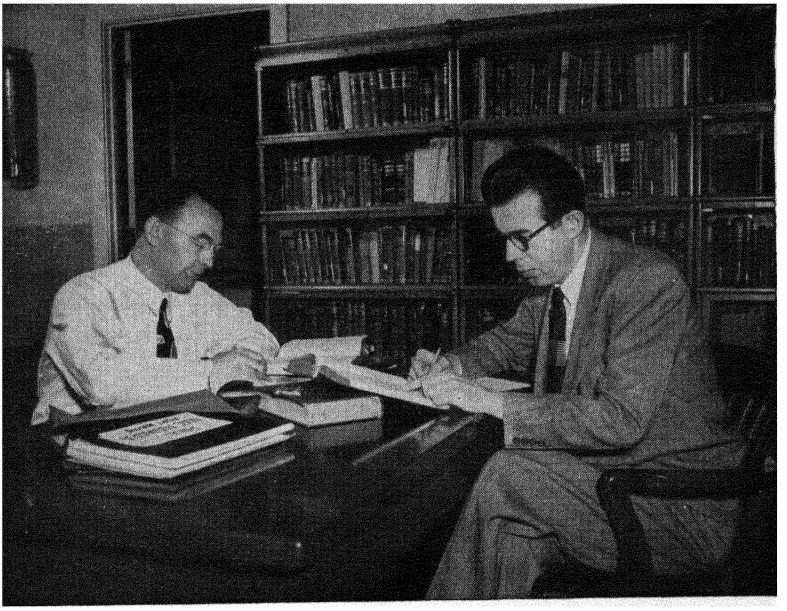
There is much satisfaction in owning your own books and in subscribing to good magazines. The cost of good books is now within the reach of almost everyone, and a few dollars regularly invested builds a good private library in a few years. Some basic reference books are invaluable in one's own home or office. A good dictionary, a set of encyclopedia, a thesaurus, an anthology of literature, a world history, and an atlas are most helpful for even a small library. Add to such a basic reference shelf a book or two on each of the fields of study listed above, and you have at your finger tips an excellent library for study on a vast array of topics.

Public Libraries

Nearly every community now has a good public library, with a professional librarian eager to help anyone select books for his particular needs. Don't be shy about asking a librarian for help on your special educational problems; that is what they are there for, and you will find that they are usually eager to give their expert advice and to help you find exactly the right material.

Company Libraries

A good many firms have their own libraries. The company has bought these books in the hope that employees and supervisors will use them. Usually these libraries contain the best books and



Make use of the company's library. It usually has the best books and periodicals which pertain to your work and products.

periodicals pertaining to the work and products of the company. Get the library habit! Get acquainted with the librarian, and take a book out every week.

Study Courses

Any person in the United States, no matter how remote his community, can enroll for courses of study to meet his educational needs. Nearly all colleges and universities offer extension courses which are either given by mail or are actually presented in regular classes in towns and cities away from the school. Teachers and lecturers hold regular sessions for adults and thus provide many of the courses of study which previously were available only on the campus. Furthermore, it is usually not

necessary for you to have a high school diploma or to meet any special academic requirements to enroll for this instruction. Such courses are probably the best single way of broadening one's education, since they develop the subjects in a systematic manner which is geared to the learning capacity of each student. If you live near a college or university town, you can nearly always enroll for regular courses given at night or in off hours; and you need not be competing for a degree to get the benefit of them. If you don't know what courses are now offered in your community or available to you through extension courses or correspondence schools, a post card to the director of the extension department of the school will bring you full information.

A number of worth-while courses, especially in drama and the arts, are being offered under college supervision through radio and television. With a myriad of educational facilities now available anywhere, few people have a legitimate excuse for not taking advantage of them for self-improvement.

Company Training Programs

The supervisory training courses developed by many companies are a direct indication of the recognition that personnel is the most valuable part of the organization. Many of these courses are given on company time and are more or less directly related to the work at hand. These courses range all the way from single, once-a-week discussion groups to elaborate schools which rival colleges in the breadth of their curriculum and the caliber of instruction. Such training is usually of immediate practical value both to the supervisor and the company. Other companies provide less formal training in the form of conferences or meetings combined with social activities. The courses or information given contain what top management feels are most essential for effective supervision and are, therefore, of prime importance for preparation for promotion.

Lyle Carey, of International Harvester's Education and Training Department, leads a discussion in a supervisors training course, conducted at the company's Central School.

One of the best company training programs is conducted by the International Harvester Company at its Central School in Chicago, with follow-up courses and weekly conferences in the various plants. Supervisors of all grades, as well as sales personnel, are brought into the company's Central School at company expense for intensive training courses lasting two weeks or longer. Here the employees meet in regular classes each day from 8 to 5, to study all phases of the company's business as well as many other more general courses relating to their personal efficiency.

The content of all courses has been given the most meticulous consideration, not only by Harvester's educational and course development staff, but also by leading supervisors who serve as a committee to review the material and to make concrete sug-

gestions. Thus, the foremen's courses were developed by six foremen working for several months with course editors. The company also maintains a professional staff of instructors and uses all modern educational aids. A list of the courses from a typical two-week session for foremen will indicate the scope of the training. You will note that they fall into two areas: *company operations* and *personal development.*

The American competitive system	Human behavior
Effective speaking	Planning and organization
Organization and control	Industrial and labor relations
Company financial structure	Economics
Logical thinking	Public relations
Policy development	Supply and inventory
Employee information	Product information and distribution
Everyday writing	Labor legislation
Personal qualities of supervisors	How to build a team

Courses are presented, not only by lectures and conferences, but also by the use of films and wire recorders, dramatic plays and skits, role playing, open forums, and visits to company plants and offices. The teaching proficiency and the course content are critically rated and reviewed by all employees completing the courses. Their suggested improvements help to keep the staff on its toes and to increase the scope and value of the courses.

At the conclusion of the courses, diplomas are issued to all who completed them. These courses are followed up at the works level by weekly training conferences conducted by the local training directors.

Recently the officers of the company reviewed in detail the entire education program as conducted at the Central School, the manufacturing works, and the sales district offices. It was unanimously agreed that the program must go on, that there must be no

cutting back of this vital activity. Employee reaction to Harvester's program has been uniformly enthusiastic.[2]

GUIDANCE

Almost everyone has at one time or another felt the need for guidance from some authority on his own personal and educational problems. Men who have been over the ground themselves and authorities in the various fields can point out deficiencies and save many mistakes and much time for the person who seeks their help. The counselor may be a superior officer in the company or someone in a similar job; or he may be a training director, a personnel officer or a professional counselor or teacher outside the company. Before starting any long-range educational training program, it would be wise for a supervisor to talk over his problems with somebody of recognized standing, or better still, with several such persons. He need have no hesitancy in going to them, for it's quite flattering to be asked for advice. Guidance in educational, vocational, and personality problems is available in many universities and from professional counselors and psychologists in private practice. Here's a bit of advice before consulting any private practitioner: Make sure that the counselor is a person of proper ethical and professional standards. Thus, before following the advice or paying for the services of a psychologist, make certain that he is a member of the American Psychological Association. This is no guarantee that his judgment is entirely sound; but, at least, it does indicate that he has had the right academic training for his profession. There are many quacks and phonies who advertise and who are eager to separate you from your money. They are not qualified, and they cause untold damage through the spurious advice which

[2] See CHARLES L. WALKER, JR., Education and Training at International Harvester, *Harvard Business Review*, Vol. 28, No. 5, pp. 542–558, 1949.

they give. Some of them use their own so-called tests and talk very learnedly over the results. Usually such charlatans are in the same class as astrologers, phrenologists, and other fakers.

Correcting Personal Deficiencies

Professional psychologists and vocational counselors usually use psychological tests to determine the individual's degree of intelligence, aptitude, vocational interest, and emotional and temperamental characteristics. While such tests are by no means foolproof, in the hands of an expert they are the best scientific guides so far developed to determine strength and weakness of the individual. From his interpretation of test results, a counselor can assist you in laying out an individualized program for your education and improvement. Failure to succeed and get ahead is not always due to a lack of education. Many well-educated people still fail because of other personal weakness. In other words, they are held back, not because of lack of learning, but because of some personal, emotional, or temperamental deficiency. Among these are failure to get along with others, a hair-trigger temper, feelings of inadequacy, lack of forcefulness, low self-confidence, emotional instability, insecurity, intolerance, and a host of other such weaknesses. Usually such personal deficiencies can be rather accurately detected by tests or clinical methods. A qualified psychologist or psychiatrist can diagnose these difficulties and recommend treatment.

How to Break a Habit

Actually most of the emotional weaknesses are well-established as habits which can be corrected by the individual himself. But first he must *recognize his weakness and be eager to change and correct it.* The problem becomes one of unlearning an old and established habit and replacing it by a better one. Let's take an example. Suppose, for instance, you have a quick temper. How did

you acquire this habit of blowing your top? The chances are you learned it as an infant; perhaps if you staged a temper tantrum or threw out enough lusty squawks, your parents gave in to you. You got what you wanted that way. It was an easy and convenient way to gain your ends. You put on a stormy scene each time you wanted something. As you grew older, your habit grew stronger. People gave in to you rather than to suffer your abuse. By the time you became an adult, the habit was firmly entrenched. Now it represents a distinct handicap. Others shun your company. You fail to get ahead because you lack control. What, then, can you do about it? Yet must find a way of breaking the old habit. Any such well-established habit is performed unconsciously, that is, automatically, without thinking about it. To break it you must, therefore, make yourself aware or conscious of the act before you do it. You must use some method to make you think it over before you blow your top. Forewarned is forearmed; thus you can then control your temper.

One of the simplest and most practical corrective devices recommended by psychologists is to have the habit-bound person keep a notebook record. Any small pocket notebook will do. Take two pages for each day in the week. On one side of the notebook write the heading "Credits," and on the other side write "Debits." Everytime that day you lose control, you score a tally mark on the debit side. For each occasion when you are about to lose your temper but restrain yourself, you receive a credit tally. This score-keeping must be conscientiously done every day. Don't be disappointed if you find that for the first few weeks or months you have little to show for your efforts except black marks on the debit side. You will probably have many pages full of them, but this simple device will make you aware of your problem. Carry out this method conscientiously, and after a while you will get some credits. As the days and weeks go by, you will have more and more of them. Eventually you will find that most of the scores are

on the credit side of the ledger, which means you have mastered your old temper habit. You have learned self-restraint.

This simple device has only made you conscious of acts which previously were unconsciously performed. Yet, in mastering the habit, you have substituted self-restraint and control for it. The homely method described can be used to break almost any habit, and it is well worth the trial. It is similar to the method which Ben Franklin used for his own self-discipline, which he described in his famous autobiography. We might add that there are few better books to read on the subject of self-improvement than his autobiography.

We must recognize, however, that often the whole matter of personality adjustment is just as much a matter of breaking old, unsatisfactory habits of adjustment as it is the development of new modes of behavior. Psychological therapy in large measure deals with the breaking of undesirable habits. It is understandable, therefore, why so broad a topic cannot be dealt with in detail here.

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QUESTIONS FOR DISCUSSION

1. What opportunities exist in your community for you to continue your education and personal development?
2. What areas of weakness are there in your own training and education? What can you do to correct these deficiencies?
3. What differences in educational background are usually found between technical men and top executives?
4. Work out a budgeted time schedule for yourself which will permit you to spend regular time intervals for study and constructive reading.
5. Using this schedule, set up a program of self-improvement activities and studies for yourself for the next year.

FIFTEEN

Earning Leadership Status

"My boss is a great guy to work for. There isn't a man in the department who wouldn't go through hell for him, and the funny part of it is when he first came into our department none of us fellas thought we would like him. But he sure does wear well. He can dish it out with a strong hand and make you like it. We've made a better record every month since he's been there. He's no pushover; he's firm, but he's a swell guy too."

This little snatch of conversation contains the description of a good boss. It also refers to a supervisor who has earned the status of *leader* with his men.

The Supervisor Leader versus the Driver Boss

For centuries, managers and bosses believed that driving and dominating workers was the only way to supervise them. Punishment for the slave was death at the hands of the slave driver; and imprisonment or starvation for the serf when he disobeyed his overseer. The principal qualifications for a supervisor then were brawn and muscle. He literally had to be able to beat up anyone who went contrary to his orders. His methods were fear and physical force; he earned his title "Bull of the Woods" by his brutal acts. It has taken many centuries for management to learn that no

man can work effectively under fear and threats, that no man can give of himself to the job if he hates his boss. Such outdated supervisors had authority; they ruled by dominance. Dictators may have "headship," but they don't have leadership. Men will submit to cruel force, but always unwillingly. Their desire for freedom of action and independence is too strong ever to be blotted out completely. Men may go through the motions in following the authority's orders, but they do so grudgingly. Such workers are never cooperative. They aren't team workers. Any productive spirit that remains in them is spent in efforts to get even and to rebel against the harsh taskmaster.

WHAT IS LEADERSHIP?

Speaking of greatness, in one of his plays, Shakespeare said, "Some are born great, some achieve greatness, and some have greatness thrust upon them." Can this same thing be said of leadership? Are certain men born to be leaders? Do unusual circumstances or events make a man a leader or impel him to a position of leadership? Or can leadership be acquired?

Almost everyone recognizes a true leader; yet it isn't easy to discover just what makes him one. In the presence of a leader, others feel a certain urge to follow him; to do as he suggests, to accomplish some goal under his direction. But why are some men leaders and others followers? Do they learn to be leaders? Do leaders dominate others? Or are they followed only because they are popular with others in a group? Is the real leader greatly superior in personality, strength, intelligence? Or is he a man like the other members of his group? Does he gain his position of leadership because of some emergency or some special course of events? Or is a person who has the qualities of a leader apt to show leadership in all sitations? These are the questions which have puzzled us for a long time.

How Leaders Operate

We know now that there is a vast difference between being an authority and being a leader. Somehow, the real leader achieves much higher goals through getting the workers to *want to follow him.* In some mysterious way, certain people are able to get others to believe in them and to do what they suggest. This is leadership. The leader arouses in others the *desire* to accomplish goals or overcome difficulties. The way or pattern he suggests is acceptable to them because they have *confidence* in him. They give of themselves and "go the second mile," not only to please him, but also because he makes them feel that their efforts are worth while. Thus he develops a team spirit and a desire to serve him and the group.

There is probably no virtue or good personal trait which isn't of value to a leader, whether that leader be in a factory, in an office, in the legislature, or at the battlefront. But no one person ever possessed all the virtues, and many leaders have been notoriously lacking in several good personal characteristics. For example, General Grant, who was recognized as a very great military leader, was notably weak as an administrator and in personal salesmanship. On the other hand, some few men have possessed a great many superior abilities, and their great accomplishments rank them among the world's top geniuses. The great accomplishments of Leonardo da Vinci in the fields of painting, engineering, mathematics, architecture, invention, government, music, and philosophy were the works of a leader who was also a genius. The same may be said for Benjamin Franklin, who demonstrated his greatness of both leadership and genius in finance, electricity, philosophy, politics, writing, mechanics, government, and human relations.

But must one accomplish great things to be a leader? On this question many writers and thinkers have become confused. Lead-

ership is not accomplishment of one person by himself but rather the process or method used by a person to inspire *others* to accomplishment *by working with him.* It is, therefore, not necessary for a person to be a genius or vastly superior intellectually to be a true leader. There are leaders among children, among illiterates, as well as among men of science and public affairs. If leadership were to be measured purely by the amount a man accomplishes, then the best producer in the plant or the person who turns out the greatest volume of work in the office would be the leader. But many leaders don't actually produce things. Rather, the leader seems to be able to get others to want to do things and to do them under his guidance. Our common sense tells us that where there is a leader there must be followers. This implies, then, that leadership has a social significance. That is, the leader must exercise his influence over others in some way that is *acceptable* to them, so that they will follow his suggestions and ideas. But men and armies can be made to obey dictators and harsh drivers. Here we must define what we mean by *following*, to understand the true nature of leadership. The soldier or worker who obeys the harsh master does so because he *fears.* He is afraid *not to obey* the dictator. The use of fear and force are tactics of the driver. Under the whiplash, the slave will grudgingly obey the master. Under the commands of a brutal officer, the soldier will charge the enemy because he fears the punishment meted out for insubordination. So the worker in industry may obey orders because he fears being fired by the driver boss. When men obey another because of fear, they are *submitting to authority*; they are not following, they are *yielding.* Their obedience is given grudgingly. There is little loyalty or teamwork, and no desire to give their all for a common cause. But when men *follow*, they do so willingly—because they *want to do* what a leader wishes. Herein lies the distinction between being an authority and being a leader. The leader stimulates, motivates, and inspires the group to follow

willingly, even eagerly. The authority pushes and drives his men, who yield and obey because they fear the consequences of disobedience.

A Study of Leadership

Since the days of the ancient Greeks, philosophers have speculated on what a person had to be or do to become a leader. But this armchair thinking did little to reveal the mystery. Little was accomplished until the Second World War, when the dire emergency became so great that careful research was thoroughly applied to the question. In all the armies of the Allies and, in fact, of the enemy too, the need for effective leaders was so urgent that scientists were taken from other important projects and assigned to the problem. The story of this research is fascinating.[1] Its results illuminate our present knowledge of the facts of true leadership in industry and business. During the war, men were carefully screened by tests and given highly specialized training to develop them as commissioned officers. College-trained men who made high scores on the army intelligence tests were given preference and placed in officer training schools. There they received detailed instruction in the methods of commanding men. But despite all this careful selection and training, many of them failed as leaders. In emergencies their men simply didn't follow them. Often noncommissioned officers became the real leaders in battle. Placing a bar on a man's shoulder and calling him a second lieutenant gave him authority, but it didn't make him a leader. The researchers concerned themselves with this difference and set for themselves the task of finding the difference between an *authority* and a *true leader.*

Many different methods were used in their experimentation. Here we shall briefly describe only one which yielded much in-

[1] Cecil A. Gibb, The Principles and Traits of Leadership, *Journal of Abnormal and Social Psychology,* Vol. 42, No. 3, 1947.

formation on the true nature of leadership. Small groups of ten to fifteen enlisted men were assigned some special problem or goal to achieve, but no one was put in charge of the group. No corporal or sergeant or other invidual was given any authority over the group. Hidden observers made careful notes of what happened, as the leaderless group attempted to achieve the goal set for it. Thus, one leaderless group was assigned the task of building a bridge across a stream; another was told to move a heavy piece of artillery up a mountain side. Other groups were assembled in a room and asked to discuss some interesting question. Hidden observers took careful notes to see who became the leader of the group, how he became one, and what he did.

After hundreds of such leaderless groups were observed, the men who attained leadership were carefully studied and tested, to find how they differed from other members of the group and to determine what qualities they possessed which made them leaders. These leadership traits which were common to most of them will be discussed later, but first let us briefly review the principles which were unearthed which point the way to what leadership seems to be.

Every Group Has Its Leader

Sometimes a small number of men were sent out and given no problems to solve or goals to achieve. In such cases, the soldiers didn't form a group but rather wandered around as so many individuals. No leader arose because there was no demand for leadership.

But in every leaderless group which was assigned a job to do or a goal to attain, a *leader always arose out of the group.* Sometimes a member of the group would assert himself and formulate a plan for the group to follow. Such a man frequently was followed by the others only until they lost confidence in his inventiveness or the plan which he set for them. More often, a member of the

group was elected or propelled to leadership status by the other members of the group. Something about his personality attracted the others to him to the extent that they had more confidence in him than in other members of the group.

The first principle which can be derived from the experiments is that *whenever a group has a common goal or problem, a leader always arises from within the group itself.* Usually he is appointed by common consent of the members of the group because of their belief in his ability to help them achieve the common goal. We may conclude that true leadership is both a function of the social situation of the group and a function of personality. In other words, leadership depends on the individual personality traits of some member of the group and on his interactions with the other members of the group. Somehow, this one chosen member (the leader) has characteristics (or the group thinks he has) in which the group members have confidence. He is able to inspire *confidence* from others. The plan which he suggests is accepted by the others, at least on a trial basis, because of the confidence they have in him. Such authority which he has is bestowed on him by the group members. Here we have one of the essential differences between authority and leadership. A true leader is usually a member of the group who is appointed by the group members *themselves. He is one of the gang.* His authority is by *consent* of the group.

The second lieutenant, the office manager, or the foreman in industry, on the other hand, is appointed by top brass or top management. Usually he hasn't been a member of the particular group he is supposed to lead. He is the stranger who is thrust upon them. To him was given certain authority which doesn't come from the group itself but rather from higher management. Men may yield to his authority because they feel they have to, or from motives of fear; but the true leader, who is appointed or accepted by the group itself, is followed because the men accept

his ideas as their own ideas. He personifies for them their ideals. In him they see themselves. Since the members of the group *participated* in his selection and in setting up the plan of action, they accept him, cooperate, and follow him.

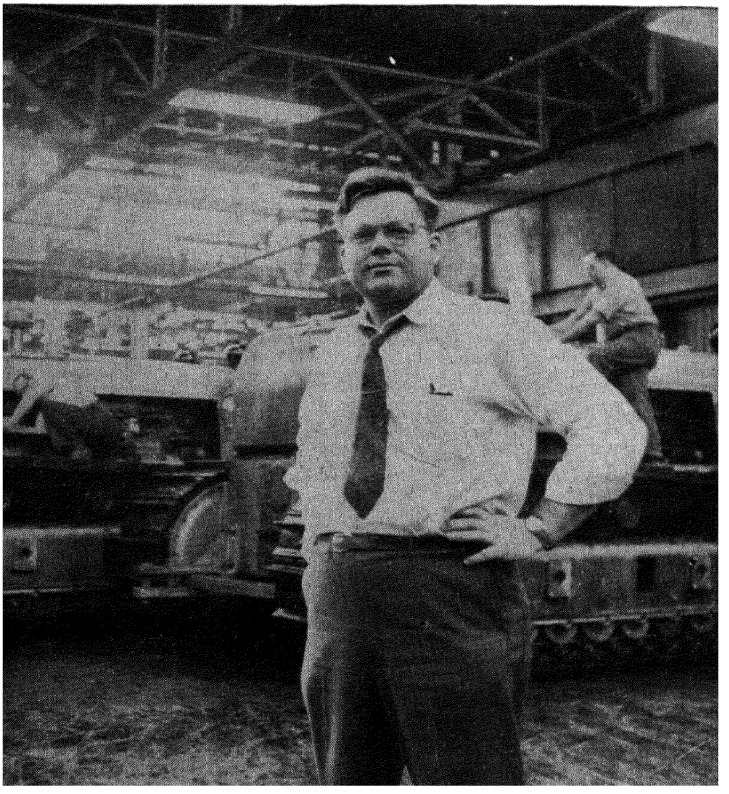
There Is No Single Trait Called "Leadership"

It was noted in observing a large number of leaderless military groups that the man chosen for leadership didn't always retain his leadership status in all the activities of his group. Often a man would serve as leader for a while, and then the group would reject him and appoint another. They had lost confidence in the plan which he set up for them to follow, or for some reason he became ineffective in the way he tried to lead. From this we conclude that *there is no one trait of personality which can be called leadership.* Instead, leadership seems to be a complex combination of characteristics which varies under certain conditions even with a single group. A man may be a leader in one situation and not in another. However, there are a few men who can be leaders in nearly all situations and circumstances. Apparently, they possess more of the essential traits or they use more effectively their leadership abilities than do others. They seem to have learned how to put them across better to gain acceptance. We can't hope, then, to discover any one characteristic that we can study which inevitably makes a man a leader.

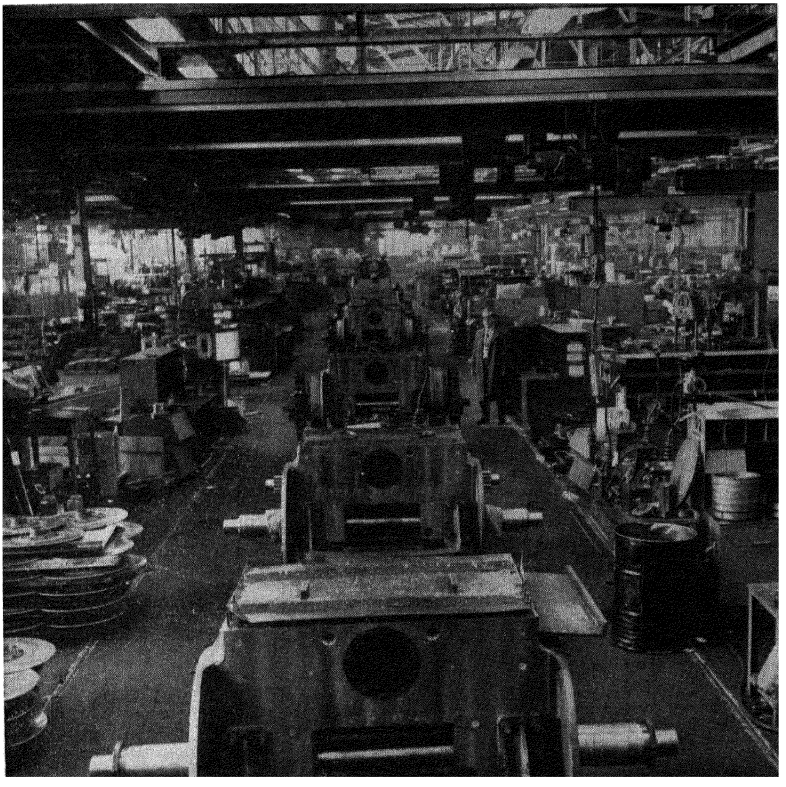
There Is No Leadership in Isolation

One of the most important principles of leadership observed in the methods of all these natural leaders is that they mingled and interacted with all members of the group nearly all the time. The real leader wasn't the man out in front carrying the flag. He was rubbing elbows with the other men, talking and working with them constantly. The principle here is that *there can be no leadership in isolation.* No one can lead by remote control. The

leader must not only be *of the group*; he must be *in the group* too. Regardless of his personal superiority or the excellence of his plan, the group didn't follow him unless his ideas were communicated to them. The followers had to associate with the leader to give expression to his ideas. In all situations where there is a real leader, there is always a *will to lead*, on one side,



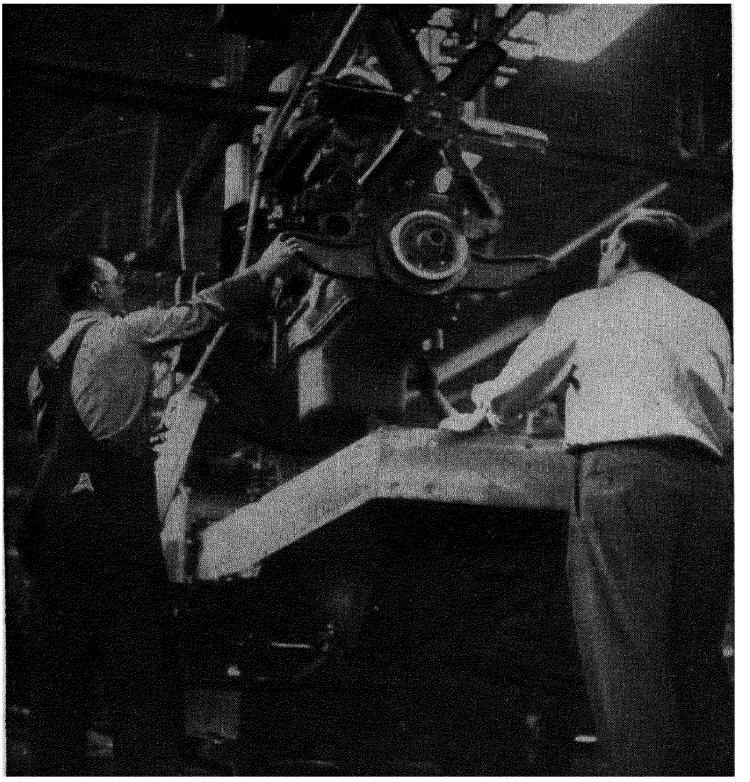
General Foreman Russell Gilman, of Harvester's Melrose Park Works, is the successful leader of the men who make the giant crawler tractors in Department 33. He knows all his 55 men personally. Because he was promoted from the ranks, and because he has learned how to lead them, his men give him and the company their loyal support.



After his men have gone home, Gilman surveys tomorrow's quota, planning the work for each member of his team.

and the *will to follow* by common acceptance, on the other. No man can gain acceptance with a group unless he frequently communicates *in person* with the members of the group. He must mix with them.

To managers and supervisors this principle points up the importance of working directly with the men, to the value of making the rounds and of spending most of his time in their presence. The manager or supervisor who sits in his office and attempts to



Like most successful leaders, Gilman spends much of each day working with his men. He knows that he cannot motivate his men by remote control.

control and lead his men through reports and records and by issuing directives can never lead.

The Leaders Don't Originate All the Ideas

Real leaders get most of their ideas from the followers; they don't create or originate all the plans. Here is another very important principle of leadership. It was noted in the groups under observation that the leaders picked up most of their ideas from

other members of the group. They were always very alert to suggestions coming from the followers. Occasionally they had an original idea; but, for the most part, they gathered the ideas for their plans of action from the others. They encouraged *participation* of all members of their groups, and they were able to assimilate their suggestions and reflect them back in a way that was acceptable to the followers. We might call this "democracy" in supervision; it is "group participation" in management.

Some people still cling to the old belief that to be a good manager one has to create all the ideas and issue commands to enforce them. True leadership, however, involves a *gathering* of ideas and suggestions from the followers and *communicating* them back to them in such a way that they are received favorably. A real leader has an ability to *give* and *take,* to *adjust* to his group, and to phrase orders so that the group members will accept them as their own goals. To supervisors in office and factory, this principle may be the most important of all. Sometimes it is extremely difficult for the young, inexperienced supervisor to allow his men a voice in affairs of the department. A young foreman may feel that he, and he alone, must have all the ideas. He feels that he will lose face if he uses a suggestion coming from his subordinates. The army studies show conclusively that when one is attentive and receptive to the ideas of the followers, he gains in *prestige* and strength. Instead of weakening his effectiveness, he is cementing the group together into a team which has a common goal. The real leader seems always to embody many of the qualities of the followers. He symbolizes their ideals, and, in doing so, earns prestige and retains his leadership.

The Essential Qualities of Leaders

After the army researchers observed these several practices and methods used by the chosen leaders, they wished to deter-

mine what traits, if any, these group leaders had in common. Since leadership isn't any one characteristic of personality, it must be, they reasoned, composed of a number of traits. To find out what these traits were, the scientists made careful, detailed studies of the men who had been chosen as leaders by their groups. They were rated by people who knew them well. They were also given many tests to determine their abilities and other characteristics. By measuring several thousand such leaders, it was found that nearly all of them had a few characteristics in common. These were the traits which apparently had the most influence on the followers of the group and which seemed to make the leader effective with his group. These traits should be considered carefully by all supervisors, since through their proper development, together with the practice of leadership principles, the way may be charted to a position of leadership. The real leaders had a *little more* of the following traits than other members of their groups:

Intelligence
Education
Sociability
Self-confidence
Aggressivneness
Adjustability
Emotional maturity

Nearly all the men selected as leaders by their groups were somewhat superior to the followers in these traits, as shown by their higher scores in the ratings and test results. But note, *they were not vastly superior* to the other members of their groups. For first-line leadership, it is of the utmost importance that the leader be much like other members of his group. If he is too different, they will refuse to follow him. They won't subordinate themselves to a person who is utterly different from them, but they will follow willingly if a member of their own group has most of the above characteristics and if he practices the principles of leadership. And these principles are the laws of good

human relations. The true leader embodies most of the qualities of his followers. For that reason he is better able to interact personally with his group, to understand their needs, to command their respect, and to influence them to take certain actions. Leadership is a process of mutual stimulation in which the attitudes, traits, and motives of the followers play just as important a part as does the personality of the leader.

A leader doesn't have to be a big man physically or handsome or striking in appearance, despite what many people still think. He doesn't have to be an older man either. The army studies disproved all that. No relationship was found between leadership and height, weight, appearance, manner, bearing, or age. These seem to be the very factors in industry and business and in many other walks of life which have been given much consideration in appointing men to leadership jobs. Apparently these ideas are hangovers from a belief in physiognomy or perhaps the belief that it required a big man to dominate others by physical force and power.

If you observe the officers and supervisors in many companies, you will usually find that many of them are above average in height and weight, that they have a pleasing appearance, and that usually they are older in age or experience. While many of these individuals have been successful in leadership, who knows how many shorter, younger, or less handsome men have been passed over who might also have been just as successful or even more so? It isn't, then, the handsome face or fine physique or gray hair which gives a man prestige in his group. Rather, it is his inner qualities, which are psychological in nature, that are most important. Fortunately several of these qualities can be greatly improved by proper study and training. It should be a real solace to everyone who aspires to leadership to know that he doesn't have to be born to leadership and to know that leadership principles and methods *can be learned.*

Supervisors Must Earn Leadership Status

Nearly all men and women who are promoted to supervisory positions today are selected because top management thinks they have the qualities which will enable them to be good supervisors. If they are deficient in some of the virtues of leadership, they can nearly always acquire them through study, effort, and self-development. But they may be handicapped because they were not previously members of the group they supervised. The likelihood that they were actually chosen by the group itself is remote indeed. They have two strikes on them. They are in much the same position as the second lieutenants who were authorities rather than leaders, because they were *thrust* on the group. They were not really *of the group.*

How can a supervisor overcome this handicap? The answer is clear from experience and the research done on leadership. He must learn and practice the principles of leadership; and they are the principles of good human relations, which constitute the theme of this entire book. When the supervisor lives and conscientiously practices these principles, he can earn a status of true leadership. All that is best in human relations was eloquently given to us two thousand years ago in the Golden Rule: "Do thou unto others as you would have others do unto you." It is still the best guide and philosophy for living together, for progress, for peace and happiness.

Questions for Discussion

1. Do you think that there are any qualities that are absolutely essential for a leader to possess?
2. It has been said that a good executive must be properly stupid, so that he is forced to rely upon the ideas and suggestions of his subordinates. Do you agree? Discuss.

3. If size has nothing to do with leadership ability, why is it that so many business executives and industrial leaders are physically large?
4. Briefly describe the functions of the leader.
5. Are there differences in leadership function from the lower to the higher echelons in business and industrial organizations?
6. Is the problem of military leadership essentially different from that of business leadership?

APPENDIX ONE

Case Studies

The four case studies which follow are typical situations taken from industry. They illustrate various problems in supervision and human relations. They are included here so that the supervisor may express his opinion on the questions about them and as an aid to the training director for group discussions. The correct answer, of course, depends on the conditions in each case.

CASE 1

When George was first employed 11 years ago as a lathe operator, his production, attendance, and attitudes were above average. He was fairly popular with the other workers and never complained or submitted a grievance.

After about two years, George was absent on several occasions and refused to go to the medical department for a checkup. A little while before this, it was rumored about the shop that George was having domestic difficulties and that his wife had left him. Not wishing to pry, George's foreman said nothing to him about his personal affairs.

George became surly and aloof. While his attendance improved and his work was above average, he avoided accepting responsibilities

and grumbled so much that the other workers avoided him at lunchtime and did not include him in their jokes and discussions. George was never an active troublemaker, but his "chip-on-the-shoulder" attitude made him unpopular; even his foreman avoided him as much as possible, merely saying "Good morning," but seldom discussing his work or visiting with him.

One day there was an emergency change in work schedules because of rush work in the production program. The foreman followed his usual procedure of avoiding George by telling all the other men of the required change first. Finally he told George that he would have to change from the first to the third shift, starting the next night. George told the foreman to "go to hell" and walked off the job.

The statements below apply to case 1. Study each one carefully. If you agree with the statement, put a circle around the "T." If you do *not* agree, put a circle around the "F." If you are in doubt, circle the "?"

1. The foreman should have made an extra effort to be friendly with George.	T	?	F
2. By setting the example of ignoring George, the foreman encouraged the men to do so also.	T	?	F
3. George should have been reprimanded when his attitude became "sour" and told to forget personal affairs on the job.	T	?	F
4. The foreman, when he observed the change in George's attitude, should have created an opportunity to let him talk about his troubles.	T	?	F
5. If the foreman had verified the fact that George had domestic troubles, he should have talked to George's wife and tried to patch up the situation.	T	?	F
6. George's poor attitude probably had no effect on the morale of the rest of the men.	T	?	F
7. Had the foreman just served as a good listener for George, he might have helped him a lot.	T	?	F

8. When George told the foreman to "go to hell," the foreman had to discharge him to save face and hold the respect of his other men. T ? F

CASE 2

Joe, a high school graduate, had been working as a tool-crib helper in the machine shop. He was efficient in his work, which consisted of keeping an inventory of the small tools and stock on hand and helping fill requisitions for parts and tools.

After he had been on the job a year, he began studying steamfitting at night and definitely decided to become a steamfitter. His instructor told him he had definite aptitude for that work. To gain useful experience, he asked his foreman to transfer him to a job as helper in the steamfitting department.

His foreman had had considerable difficulty getting satisfactory men for the tool crib and did not want to lose Joe. But when Joe requested the transfer to steamfitting, his foreman listened politely and gave Joe the impression that he was eager to help him achieve his ambition to get experience. Instead of following the regular procedure of having Joe fill out a Request for Transfer form, the foreman called the personnel department to see if there were any openings in the steamfitting department. He did not pass on Joe's request to the personnel department either verbally or in writing.

When he found that there were no vacancies in the steamfitting department, he told Joe that he could not be transferred at that time, but that he would be considered when the next opening occurred. Six months later, Joe repeated his request and was told by his foreman that there had been no openings. The foreman did not call the personnel department, either to verify this or to place Joe's name on record for transfer consideration.

A few weeks later, a friend of Joe's from another department was transferred to the steamfitting department. He was not nearly as well qualified as Joe and had less seniority. Joe was annoyed by this and went to the employment interviewer to complain. There Joe was told that there was no request for transfer on file for him and that the per-

sonnel department had no knowledge of his wish to get steamfitting experience. Joe felt that his foreman was holding him back. He became indifferent about his work and made numerous errors. He made application for a steamfitting job in two other companies. Later, by going directly to the foreman of the steamfitting department, he was able to get him to request the personnel department to arrange for his transfer. Joe's foreman complained to his works manager that the personnel department and the steamfitting department foreman were pirating his best men.

The statements below apply to case 2. Study each one carefully. If you agree with the statement, put a circle around the "T." If you do *not* agree, put a circle around the "F." If you are in doubt, circle the "?"

1.	A man who wants a transfer is usually a "floater" who will probably never be reliable.	T	?	F
2.	A foreman should help his men to get promotions or transfers they want, even if he isn't sure of their aptitude.	T	?	F
3.	It is always good policy to transfer men to the kind of work they prefer, if they seem qualified.	T	?	F
4.	In this case the foreman was unfair to Joe by not following the regular transfer request procedure.	T	?	F
5.	A foreman has a duty to hold his best men, since he is responsible for the production of his department.	T	?	F
6.	If there are none or very few requests for transfers, this may be taken as a sign of a well-supervised department with high morale.	T	?	F
7.	Joe should be reprimanded for "going around" his foreman to the personnel department, without first asking permission of his foreman.	T	?	F
8.	When a worker has to "go around" his foreman to get attention, it indicates that the foreman is not functioning properly.	T	?	F

9. All transfers should be cleared through the personnel department, to prevent unfair or biased treatment. T ? F

CASE 3

Foreman Al Creel never liked men of Italian stock. Years ago he had worked under one who was unfair and a very hard taskmaster. Creel always resented the way he had been treated and felt that all Italian-Americans were unfair and could not be trusted.

Creel had 20 years service with the company. Because of his excellent record, six months ago he was promoted to head a larger department. He knew the methods in his new department, but he did not know many of the employees. He was upset to find that one of the best rated workers, Tony Sarello, was of Italian parentage. Creel was sure that the man had been overrated and was not that good. He decided to watch him closely and find out.

Tony had 12 years service with the company. Investigation later revealed that he not only had a good production and attendance record but also was well-liked by his fellow employees.

Tony soon became aware of Creel's close supervision. He resented being singled out by Foreman Creel, who checked up on every detail of his work and behavior. At first, Tony tried to pass it off, but his irritation came out when he answered some of Creel's prying questions. One word led to another, and over a period of time an obvious feud developed. One day Creel passed Tony's workplace and caught him apparently breaking a minor rule. Creel promptly cussed him out and called him a dirty Dago. Tony knocked Creel down.

The statements below apply to case 3. Study each one carefully. If you agree with the statement, put a circle around the "T." If you do *not* agree, put a circle around the "F." If you are in doubt, circle the "?"

1. Since Creel disliked Italians, he should be allowed to fire or transfer them out of his department. T ? F
2. Tony was completely justified in hitting Creel. T ? F

3.	Creel's prejudice against Italians disqualifies him as a foreman.	T	?	F
4.	Creel's general foreman should reeducate him to a sounder attitude toward Italians.	T	?	F
5.	Creel's judgment in this case was so poor that he probably has many other bad prejudices, and he should be demoted.	T	?	F
6.	Tony should be transferred to another department.	T	?	F
7.	Creel's treatment of Tony no doubt lowered the morale of the entire department.	T	?	F
8.	Creel, in this case, should have made an even greater effort than he made with the other men to get to know Tony as an individual.	T	?	F
9.	Many people have prejudices like Creel's and don't even know they have them or remember how they got them.	T	?	F
10.	Since Tony was guilty of breaking only a minor rule for the first time, the foreman should have overlooked it entirely.	T	?	F

CASE 4

Cy Higgins and his old army buddy Sam were hired together to work in the yard gang. Both men had been honorably discharged after overseas combat service and worked well together in the gang. Cy was a farm boy who had never before worked in a large plant and seemed nervous unless his friend Sam worked along with him. While he was not unfriendly with the other men, he was shy and seemed dependent on Sam. He always did his full share of the work, and his foreman was glad to have him.

After six months, Sam was promoted to a better job in the plant. This separated the two men at work. Cy became restless, and he was

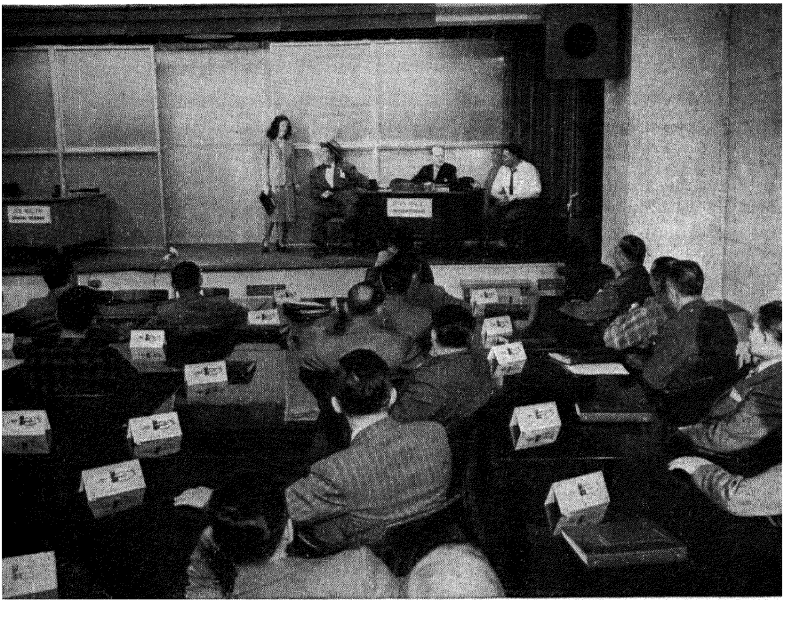
frequently absent. He made no complaints but avoided the other men and rarely talked with them. His absences for what seemed to be trivial reasons became so frequent that his foreman talked to him about it. His attendance record improved for a couple of months, but he was often tardy and showed little interest in his work. Then his attendance got bad again. He was so irregular in attendance that his foreman finally warned him that he would be forced to take drastic action unless Cy corrected his faults. Now the foreman has added two good men to the gang, and the manpower needs of the gang are not so great. He could get along without Cy; yet, when he recalls that Cy is a veteran and how well he worked at first, he hesitates to discharge him.

The statements below apply to case 4. Study each one carefully. If you agree with the statement put a circle around the "T." If you do *not* agree, put a circle around the "F." If you are in doubt, circle the "?"

1. Cy is too troublesome and unreliable. He should be discharged.	T	?	F
2. Cy has the makings of an excellent yard man if he were disciplined sternly.	T	?	F
3. Cy should have been transferred with Sam.	T	?	F
4. Cy is just a shy country boy who should be laid off and reprimanded, to "wake him up."	T	?	F
5. The real cause of Cy's irregularity in attendance and lack of interest is probably insecurity. His foreman should spend a lot of time with him to "build him up."	T	?	F
6. Even with the labor shortage, the foreman was too tolerant with Cy. He should have been discharged earlier.	T	?	F
7. Cy may have become discouraged when he did not get a promotion like his friend Sam. His foreman should try to get a promotion for him too.	T	?	F

8. The foreman might have salvaged Cy if he had taken a greater personal interest in him and tried to get him adjusted both at work and outside the job. T ? F

9. Cy might have profited by seeing the counselor at the Veterans Administration. His foreman should have suggested this. T ? F



This scene from "O Would Some Power" holds the interest of a class of Harvester foremen at the company's Central School.

APPENDIX TWO

O Would Some Power

A Skit on Human Relations
in one act

Written by WILLIAM J. POLLARD

Course Development Section
Education and Training Department
International Harvester Company

This one-act play is presented as a regular feature of the Human Relations course for supervisors at the Central School of the International Harvester Company. It contains a number of good and bad supervisory practices in the area of human relations. After this play is presented, it is followed by a group discussion of the practices and methods depicted. Several questions regarding them are listed in the study guide, which is also reproduced here.

We are grateful to the International Harvester Company and to Mr. Pollard for permission to reprint this material.

"O wad some Pow'r the giftie gie us
To see oursels as ithers see us!"
—ROBERT BURNS

CAST OF CHARACTERS (*as you meet them*)
John Mack, *superintendent*
Polly, *secretary*
Elmer, *a worker*
George, *Mack's assistant*
Lou, *production clerk*
Pete, *a foreman*
Joe, *general foreman*
Rogers, *a worker*
Mike, *a worker*

The scene opens in the general office of the machine shop in a large manufacturing plant. From an organizational structure chart on the rear wall, one sees that this division of the plant comprises five separate departments, each with a general foreman and various assistants.

At left center is a desk, a fairly large one, littered with catalogues, models of various kinds of equipment, parts, papers, reports, etc. In the corner behind the desk, which is placed at an angle, there are two telephones. Chairs are conveniently placed about the office and are easily accessible for use at the desk. The littered condition of the desk should in no way indicate poor housekeeping. It is, rather, a disorder showing that the person who works there is a very busy man. A placard hanging on the front of the desk tells us this is the office of John Mack, the superintendent.

At the right upper corner of the office is a door leading to the outer room where clerks, timekeepers, and the assistant are kept busy. One doesn't see these workers through the door, but he is keenly aware they are out there, because from time to time various ones come into the scene to ask questions, bring a message or a report, etc., to the boss.

Extending the imagination or perspective beyond this outer room, one feels the activities of the machine shop itself running on a very heavy production schedule. One senses that this shop is filled with all types of human beings and machines, all struggling toward the same end—greater security in increased production. In this human and mechanical bedlam there are as many problems, human and mechanical, as there are men and machines.

As the curtain rises, Mack is seated at his desk. He is busy trying to catch up on some of his work. The phone is heard even before the curtain goes up. The phone continues to ring, its persistence suggesting impatience on the part of the person at the other end of the wire.

MACK: (*Answers phone*) Mack speaking! . . . Yeah. . . . WHAT! Oh, NO, not another one! . . . Yeah? . . . Well, I'll be damned! . . . What did Joe say about it? . . . He did? . . . Yeah, he's been spoken to several times. . . . Yeah, sure, I'll let you know. Okay, thanks for calling! (*Hangs up. Pushes buzzer on right of desk. Pause. . . . Polly sticks head in door.*)

POLLY: Want something, Johnnie?

MACK: Yeah, Polly. Is George still tied up in that production meeting?

POLLY: They're just breaking up. You want 'em to wait?

MACK: No. Just tell George I'd like to see him right away, will you?

POLLY: Okay, Johnnie! (*Starts to go.*)

(*Elmer enters. Elmer is just a roustabout who has been sent on an errand. He is determined that he will live up to the letter of his instructions. He is carrying a small piece of steel stock such as might be used for a boring or cutting operation.*)

POLLY: What can we do for you?

ELMER: I'm tryin' to find—

POLLY: (*Because Elmer doesn't look like anyone important—he doesn't really seem very bright—Polly dismisses him from the boss's office as quickly and flippantly as possible. She has no time for small fry.*) Right down the hall to your left! (*She points off right. Elmer exits according to direction. Polly exits left.*)

(*Phone rings.*)

MACK: (*Answering phone*) Mack speaking! . . . Good morning. . . . Yeah, I think it's all set. . . . Say, can you come out this afternoon? I'm interested in that double-action attachment. I think it will ease up a situation we have here. . . . Yeah, about two-thirty? . . . That'll be fine. . . . So long! (*Hangs up phone.*)

(*During above speech, George, Mack's assistant, has come in and is motioned to a chair at right upper end of desk.*)

MACK: (*Turning from phone*) How was your meeting this morning, George?

GEORGE: Oh, usual stuff. You know, I think we should—

MACK: Did Joe have anything to say about the situation in his department?

GEORGE: DID he? He REALLY blew his top, but I'll get to THAT in a minute. First, I think we should do something about stock for Department 36. Ed says he can't locate that skid. Says he'll have to send some men home if they don't find it.

MACK: Well, why isn't it there? Did he check on it?

GEORGE: Yeah, Materials Control says it was sent out of the forge shop. Where the hell it is now NOBODY seems to know!

MACK: We've got to do something! Tell Ed to send someone down to the forge shop to see if they've run a few extra. Keep right after it, George, and see what you can find out. (*A new idea.*) Say, maybe you can "BORROW" some from the PARTS Department. In the meantime, I'll send Lou out to chase it down.

GEORGE: (*Starts to go*) Yeah, all right.

MACK: Ask Lou to come in.

GEORGE: Okay! And, Johnnie, be sure and check on that grievance meeting. (*He exits.*)

MACK: (*Takes phone and dials—calls after George*) Come right back, will you, George.

GEORGE: (*From outside*) Yeah!

MACK: (*In phone*) Say, Dan, is that meeting scheduled for today? . . . Right after lunch? . . . That's fine. . . . Yeah. Thanks! (*Hangs up.*)

LOU: (*Enters*) Did you want me?

MACK: Yes, Lou, come in! Are you awfully busy out there today?

LOU: No, not too busy, why?

MACK: Well, we've lost a skid load of stock that was routed to 36. All we know is, it left the forge shop, but nobody knows where it went. My hunch is the trucker just left it somewhere else by mistake. I'd like for you to take a turn around to see if you can find it.

POLLY: (*Enters*) Johnnie, Pete's out here. He wants to talk to you about something.

MACK: Oh, yeah, I know! Tell him to come in. (*Polly exits.*)

LOU: What is the stock, Johnnie?

MACK: It's the shaft, M452, for that reaming job.

(*Elmer enters.*)

ELMER: I'm trying to find—

LOU: Ask one of the girls in that office out there.

ELMER: Huh?

MACK: We're busy! Ask the girl outside. (*Elmer exits.*) Stop and see Ed Hicks before you go, and let me know soon as you get back.

LOU: Okay, Johnnie. I'll get started right now.

MACK: See you when you get back.

LOU: Right! (*He exits. . . . Meets Pete coming in*) Hi, Pete.

PETE: (*Enters*) Hi, Luigi!

MACK: (*Phone rings*) Come in, Pete! Sit down. (*Takes phone*) Mack speaking! Yes . . . hello, Bill . . . yeah? . . . How'd he take it? . . . Yes, sure, . . . Pete said he was worse than ever! . . . I hated to let him go, but there just wasn't anything else to do under the circumstances. . . . Yeah, Pete's here now . . . Yeah, I'll tell him. . . . Well, thanks, Bill. . . . You bet! (*Hangs up. Turns to Pete*) That was the general superintendent. He said he upheld our decision and paid that guy off. . . . The guy admitted he was wrong.

PETE: I'm glad there was no trouble about it. It was my first experience like that, and I didn't know quite what to do.

MACK: You did just right, Pete. You took him to medical, and that's exactly what I would have done.

PETE: I'm sure glad it was all right!

MACK: Pete, I've been wanting to tell you something for a long while. Look! (*Finds record book on desk and opens it at desired page*) Here! This is what you did last week, Pete, and over here is what your department was doing a month ago. Production has increased 15 per cent since you took over down there. You're doing a damned good job down there, Pete, and I want you to know we appreciate it.

PETE: Well . . . thanks, Johnnie. If I get any credit, I owe it all to you. When I got in that jam that time, you believed in me and gave me a chance. You helped me get back my faith in myself. I'll never forget that, Johnnie!

MACK: You've got the right stuff, Pete.

PETE: (*Starts to go*) Well . . . I gotta get back.

MACK: Okay, Pete, see you later. (*Pete exits.*)

(*Slight pause. Mack busy at desk.*)

POLLY: (*Enters*) Here's that file you wanted. (*Puts file on desk. Starts to go.*)

MACK: Thanks. Oh, Polly, if those guys from the grievance committee come up to ask about timing that boring operation in 36, tell Ed not to sign 'em in, will you?

POLLY: Are those guys trying to butt in again?

MACK: It seems they've got their eyes on THAT job again. That operation was just timed, and there's no sense in them snooping around up here any more.

POLLY: If I ever forget I'm a lady, I'll tell those guys what *I* think of 'em! You'd never be bothered with 'em again, I'll guarantee that! (*Goes to door*) The trouble is—I never can forget I'M A LADY! (*Under her breath*) damn it! (*Exits.*)

(*Mack laughs. . . . Phone rings.*)

MACK: (*Answers phone*) Mack speaking! . . . You don't say! . . . LUNCH! What's that? . . . No, I never eat. . . . (*Laughs*) . . . Okay . . . sure, about 11:45? That'll be swell! Be seein' you! (*Hangs up.*)

GEORGE: (*Enters*) Well, Ed got some stock and everything's under control—for a while! Any word about the lost skid?

MACK: No, but Lou's out looking for it. Sit down! (*George sits right of desk*) Bill called and said they paid that guy off this morning.

GEORGE: What else could they do? He was drunk! Now, about Joe—

MACK: Yeah, you said he blew his top at the meeting.

GEORGE: He sure did! I don't know what's got into that guy! No wonder those fellows want transfers. I wouldn't work for him two minutes. Something's got to be done to straighten that guy out, Johnnie!

MACK: What's happened now!

GEORGE: You see, I'm on him every morning about his production. Well, this morning, Harry, who has that milling operation, said he's not getting enough stock from Joe for a day's work.

MACK: Yeah, I know. Inspection called and said a big part of what Joe DOES turn out is scrap!

GEORGE: I was on him this morning about THAT too.

MACK: What excuse does he give?

GEORGE: Ah, he always passes the buck. Says his workers are all lousy. Blames it all on them—particularly this new guy, what's his name?

MACK: Farrar?

GEORGE: Yeah, that's it. Says the guy's a troublemaker—always loafin', spoils most of his work, talks to other men and keeps them from working.

MACK: What do YOU think about him, George?

GEORGE: Farrar? I think he knows more about that job than any man in the shop . . . including Joe.

MACK: He's certainly had lots of experience, and his references were excellent! I know the foreman on the job he had before coming here. He said Farrar was tops. Hated like hell to lose him. The only reason he left was because of transportation. Took him a couple of hours to get to work.

POLLY: (*Enters with a paper which she gives to Mack to sign. Then to George*) Hello, Monkeyface! (*To Mack*) Here's that report you wanted. (*Mack has signed paper and returned it to Polly. She starts to go.*)

GEORGE: Hey, gorgeous, how about a date tonight?

POLLY: (*At door*) Sorry. Got a date with a real guy tonight . . . but, (*à la Mae West*) call me up sometime, kid! (*Exits.*)

MACK: (*Laughs*) I think she goes for you, George.

GEORGE: Ah, nuts! This guy Farrar lives somewhere around here, doesn't he?

MACK: Yes, he does. No, George, I don't think he's the monkey wrench in the machinery.

GEORGE: Hell no! Neither do I!

MACK: Too many things point to that department—and WHATEVER the trouble is—and I think I KNOW—it's been going on for some time. Production is off; morale shot to hell; and more grievances and transfer requests than from all the other departments put together.

GEORGE: Speaking of transfers—Joe says Farrar wants one now. That's seven transfer requests all together. Joe says he wants to get rid of Farrar as soon as he can. Says that will solve his problems!

MACK: Well, I don't think so! But I do think the transfer angle gives me an opening for what I've been waiting for! (*Calls*) Polly!

GEORGE: What're you goin' to do?

POLLY: (*Enters*) Yeah, Johnnie?

MACK: Ask Joe Martin to come in for a minute, will you, Polly?

POLLY: That guy! Yeah, I'll get him—I wish my mother hadn't been so strict!

MACK: Well, ask him privately, Polly, so the others won't know what it's all about.

POLLY: Sure. (*Exits.*)

GEORGE: What're you goin' to do, Johnnie?

MACK: I'm going to get to the bottom of this thing once and for all! Too many complaints have been coming in from that department I'm going to try to find out WHY.

GEORGE: Every man down there is dissatisfied.

MACK: I'm going to change all that. I've just been waiting for a chance to get at this without stirring up a worse mess.

JOE: (*Heard outside*) What does that guy want now!

GEORGE: Well, maybe this is it—here he comes!

(*Joe Martin, a foreman, enters. An uneasiness at being summoned to the office is evident, despite his rather brusque manner. To cover this rather obvious lack of poise, he assumes an annoyed attitude—annoyed at the inconvenience—an unnecessary interruption of the duties of a "very busy man." In spite of all this, he is not a little apprehensive of the outcome or purpose of his visit. Yet, in conflict with this apprehension is a feeling of importance, an enlarged ego, a superiority to those others who have not received a personal request to visit the General Foreman. He thinks such attention gives him prestige—that the others will be impressed by his close association with top management. If one is a discerning student of human behavior, he can readily distinguish the character traits of the "old-school" foreman who believes that efficiency is measured by the vibrations set up by his cracking whip and his sharp-tongue techniques.*)

JOE: Did you want to see me, Johnnie? I—I—(*He's really very busy.*)

GEORGE: Hi, Joe!

MACK: Yeah, come in Joe. How're things?

JOE: Well, we're very busy. I've got to keep on the job every second or we have a slowdown. Polly said you wanted to see me, but I've got to get back right away. If I don't everything will be in a mess.

MACK: Well, I imagine they'll be all right out there for a few minutes. (*Is there a trace of sarcasm here? More in what he says than in the way he says it.*) Sit down! Have a cigarette!

JOE: Well, . . . okay! If you say so! (*He thinks that if anything goes wrong while he's away, it's Mack's fault*) What's on your mind, Johnnie? (*Joe thinks he is a big shot. It is important that this show through.*)

MACK: Just a minute! Oh, George, it almost slipped my mind—but will you go tell Ed about the grievance meeting this afternoon? Tell him to bring his assistant and steward and meet you and me in Bill's office about one o'clock.

GEORGE: Sure, Johnnie! And while I'm down that way, I'll look into that stock situation. (*Turns to go and runs smack into Elmer.*) What do you want?

ELMER: I'm lookin' fer—

GEORGE: Well, I'm lookin' for something too! Suppose you go that way and look, and I'll go this way. (*They start to exit in opposite directions.*) This place is like Grand Central Station! (*George exits.*)

JOE: (*He's a little apprehensive*) I . . . I haven't any time to waste sitting around here. I've got to get back. (*Starts to go.*)

MACK: Sit down! Take it easy! (*Joe sits. . . . Slight pause.*) You've got a fellow out there named Farrar, haven't you?

JOE: Yeah! (*He's been a little afraid this would come, but by his rather forced casualness he hopes to circumvent the situation.*) I've been meanin' to talk to you about him.

MACK: I understand he's been askin' for a transfer.

JOE: Yeah, and I'm ready to give it to him ANYTIME!

MACK: What's the matter with the guy . . . what does he want to change for?

JOE: Ah, he's always bellyachin! Nothin' suits him! Says if he's not

transferred, he's going to quit. I think we'd be better off without him.

MACK: How's his work?

JOE: It's all right—when he does any! But that's just the trouble, he seldom does any!

MACK: What DOES he do, Joe?

JOE: I tell you he don't do nothin' but gripe! Says he can't make out on the job—the machine won't cut right—it's out of line; it's—

MACK: Well, is it?

JOE: Hell no! The machine's all right. Pat didn't have any trouble with it when he was running it. This guy don't want to work. All he does is talk to the other men and keep them from working.

GEORGE: How do they take it?

JOE: They seem to like him! They don't complain, but they seem to be on edge all the time. That's why my production is so low.

(*Mack has been merely gathering information—getting an over-all picture of the situation—but now he seems to be convinced and from now on he has a positive approach.*)

MACK: Joe, I agree there's something wrong with your department, but are you SURE it's Mike Farrar!

JOE: Why—what do you mean?

MACK: Joe, Mike's only been here a short time, and the trouble in your department dates back for some time, doesn't it?

JOE: My department's all right!

MACK: Almost every day, Joe, I hear in one way or another that work coming out of your department is not up to specs. Instead of getting better, it seems to get worse. There's not enough of your stuff reaching the assembly line to keep them busy. They're continually being held up.

JOE: It's not my fault, Johnnie! It's just that bunch of lazy, no-good loafers! (*His temper is beginning to show*) I need some good workers!

MACK: (*He can be firm, but generally speaking, he has a quiet, easy disposition*) Nearly every fellow you've got, Joe, has been with the company a long time. If they're like you say they are, why hasn't it come out before this. There's something ELSE behind all this!

JOE: (*His temper is getting hotter*) Well, then, what is it!

MACK: Have you ever stopped to think, Joe, it might be YOU?

JOE: (*Explodes . . . jumps to his feet . . . angry*) Me! What the hell are you drivin' at!

MACK: Now, take it easy! Let's look at this thing calmly! I believe if you think it over a bit you'll find out that perhaps you're not as infallible as you may think. If we—

LOU: (*Enters*) Haven't been able to find that stuff yet, Johnnie, but I'll look some more when I've finished this job out here.

MACK: Okay, Lou, I'll let you know if I hear anything.

LOU: Right! (*Exits.*)

MACK: Joe, let's be honest about this thing! Your production is steadily getting worse, and we've got the records right here to prove it. I've hoped that things would adjust themselves—that you'd get wise to the trouble out there and correct it without our having to get mixed up in it.

JOE: I can't see where I'VE got anything to do with it.

MACK: No, Joe, I don't believe you do see. That's just it! Your production is off, and several of your men have asked for transfers. Why do they want to get out of that department? And then there's that guy you fired last month—what's his name?

JOE: Rogers? He quit! I didn't fire him. He got sore when I jumped him for being late. What the hell has HE got to do with it?

MACK: He was a good man, Joe, and we need good men, don't we? When we get them, we don't want to lose them.

JOE: He wasn't so hot!

MACK: You know where he is now? He's over at the Built-Rite works, and he won the monthly prize in his department for efficient production. I think that speaks pretty well for his ability.

JOE: If he was any good, why did he come in late? What did he walk out for?

MACK: He said he walked out because he couldn't work for you any more. He'd lost respect for you, Joe, and it's damned hard to work for a man you don't respect.

JOE: What d'ya mean!

POLLY: (*Enters—gives Mack some papers*) Here you are!

MACK: Thanks, Polly, and, say—Joe and I don't want to be disturbed for awhile.

POLLY: Okay, Johnnie! (*Exits.*)

JOE: My men respect me all right!

MACK: Joe, think a minute. Are you sure they do? They're afraid of you, yes, but is that respect? When you were in the shop, Joe, everybody liked you. You were always fair and square. But since you got to be foreman, you've changed.

JOE: What do you mean—changed?

MACK: You've become a driver with a long black whip. You can't drive men, Joe, and get anything out of 'em! You've got to be a leader, Joe, to be a foreman in this day and age. Those men have feelings the same as we have, Joe.

(*At this point Elmer appears at door—still looking—realizes he has been here before and passes on.*)

(*Phone rings—Mack answers*) Hello! . . . No, haven't found it yet! . . . yeah, I'll let you know. (*Hangs up.*)

JOE: But, Johnnie—

MACK: Now wait a minute, Joe. I hate to talk to you like this but I've got to! You know very well that a pot with the lid on will boil just so long before the steam blows that lid off. Isn't that what happened when Rogers walked out?

JOE: Well, hell, I've got to let off steam too!

MACK: Sure, but you've got to understand your workers, Joe. Understanding, and knowing what makes the other guy tick, is like a safety valve. If *your* safety valves had been working, you wouldn't have lost Rogers. Now, look, Joe, just think back to that day when you had that scene with Rogers and he walked out. . . . (*Slight pause . . . Lights begin to fade. As soon as they are out, Joe exits quickly and takes place for the next scene. Mack continues to talk while change of scene takes place*). . . . You'd been storming around the department, finding fault with everything and everybody. You've formed a habit of snarling, Joe, and on that morning you were in particularly good form! You even snarled and jumped all over the trucker when he asked you a question. Now try hard to recall that morning, Joe. I believe one of your machines had broken

down. Also, George had called you a couple of times to come to his office for the production meeting. All of this, along with Rogers' being late, had gotten under your skin. Well, just about then, Rogers came hurrying in. His eyes were bloodshot, and he was jumpy and short of breath. As he came up to you, you yelled at him . . .

(*Lights fade up on scene in Joe's office. Joe is sitting at his desk nervously looking for something that he can't seem to find. Joe yells at Rogers.* . . .)

JOE: Where the hell have you been?

ROGERS: Joe, I couldn't—

JOE: (*Speaks over Rogers' line. He's pretty angry at this point and rather abusive*) In case you don't know it, this shift starts work at seven o'clock. What the hell are you doing coming in at this time?

ROGERS: I know I'm late, Joe, awful late, but, you see—

JOE: Don't give me any buts. Damn it all, I'm tired of you guys coming in here anytime you happen to feel like it!

ROGERS: I couldn't help it, Joe. I ain't never been late but once before. That was two years ago when the big storm tied up the streetcars and I had to walk five miles to get here. . . . I'm sorry, but you got no right to talk to me like that!

JOE: I'll talk to you any damned way I please. I'M running this department, and I'm running it MY way. See! If you don't like it, get out. Go on! Get to work! You've lost enough time already!

ROGERS: (*He is trying hard to be friendly and reasonable throughout this scene*) That's just it, Joe. My wife. . . .

JOE: (*Sneers*) Oh, I suppose you're going to tell me your wife's sick!

ROGERS: Yeah, I just stopped on the way to the hospital to tell you I've got to take off today. I've . . .

JOE: Oh, yeah? What kind of a job do you think this is? Just because your wife gets a bellyache, my department has to go to pieces. Now get to work!

ROGERS: (*Pushes him with left hand. Right fist is ready for action, but he manages to control its movement*) You listen to me, you lousy son of a bitch! I've taken all I'm going to take from you. You're on the receivin' end NOW. I don't want no trouble, but you're asking

for it. I'm late! Sure, I admit it. I shouldn't be here at all, but I wanted to be fair and let you know why. I haven't got a phone so I couldn't call up. If you was a man, you'd listen. You'd give me a chance. But you're not a man—you're just a rat, and I'm not goin' to work for a rat. You can get some other guy to take your abuse, but it ain't gonna be me! SEE?

JOE: (*Yells*) You're through! Get out!

ROGERS: You're damned right I'm through! I wouldn't work for you if I starved to death! I need the job bad, but not bad enough to put up with you. (*Pushes him toward the desk.*) Now write me a ticket for my pay!

JOE: (*Writes slip*) Here! Now get out!

(*Joe exits quickly left and takes former place with Mack at the desk. Light begins to fade when he leaves. As they exit, lights go out on scene. From other scene, Mack's voice is heard continuing his talk with Joe. They are sitting as we saw them last. Joe has wilted considerably. He has seen himself in true perspective. When scene is started, lights come up.*)

MACK: You see, Joe, it seems you've lost your knack of getting along with people. Are you getting such an inflated idea of your own importance that you like to listen to yourself talk? Why not listen to what the other fellow has to say? You might learn a few things if you would. You know yourself you can't yell at people as if they were slaves. How can you expect loyalty or cooperation! A foreman in this day and age, Joe, is a leader, not a driver. He knows his men. He knows what makes them tick. He knows how they live and think; he knows their hopes and plans. I shouldn't have to tell you, Joe, that the modern foreman tries to understand his men! He knows he can't bulldoze them like YOU'VE been doing and expect to keep them on the job. (*Phone rings*) Yes? . . . Yeah, Dick! . . . Oh, let's see . . . about 3:30. . . . Yeah, Okay! (*Hangs up.*)

JOE: (*He is rather ashamed of the reflection of himself that he sees*) I think I see your point, Johnnie—but (*He doesn't die too easily*) hells bells, should I let them walk all over me? I've got to have discipline!

MACK: Sure, you've got to have discipline, but are you getting it? You

didn't get it with Rogers, did you? He'd still be here if you had been a LEADER instead of a driver. You missed the boat, Joe, and it's done you and your whole department a lot of damage—yes, and it hasn't helped the COMPANY any either. That scene with Rogers shot your morale all to hell. Your other men were sympathetic with him. They knew why he was late. Did YOU?

JOE: (*Still tries to save himself*) Well, no! He wouldn't tell me!

MACK: You didn't give him a chance to tell you; but I'm going to tell you, and I don't think you're going to be so proud of yourself either. But sometimes it TAKES a good jolt to make us see our mistakes. Did you know his wife was expecting a baby?

JOE: (*This is no concern of his*) No.

MACK: Well, she was. It was due sometime this month, I think. That morning he was late; she got up as usual to get his breakfast. Started down the back steps for something or other and fell. They didn't have a phone. He couldn't call for help, and he couldn't leave her alone. She got worse and worse, and the baby was born right then and there. Rogers was frantic. He did what he could and finally yelled loud enough to arouse the woman next door. She came in and took over. Told him to go for a doctor as fast as he could. The Doc sent an ambulance and rushed her to the hospital immediately. That's why he was late and why he was going to take off. . . .

(*Realization has come now, and old man remorse has given Joe an awful wallop. He feels a little sick to his stomach; and if we could see him, perspiration is heavy enough and dripping enough to cause him to wipe his forehead with his handkerchief. He doesn't say anything yet. If he were to speak, we probably couldn't hear him anyway—he's too weak. Then he speaks.*)

JOE: What happened . . . to his wife?

MACK: (*Continues*) . . . SHE DIED THAT NIGHT.

(*This whole speech of Mack's is delivered quietly and impressively. There is a pause during which he watches Joe intently.*)

JOE: (*With great effort he manages to speak, but his voice is a hoarse whisper*) Mack, I didn't know!

MACK: As a foreman, Joe, it was your duty to find out! If you had listened, if you had known your man—if your safety valves had been

working, this whole awful mess could have been avoided. He was trying his damnedest to tell you, but you weren't interested. You wouldn't give him a chance! Is it any wonder your men are asking for transfers? They don't want to work for you, Joe.

JOE: Yeah, guess you're right, Johnnie. I'm beginning to see what he meant when he said I was a rat. . . . I wish I could—but it's too late now!

MACK: If a fellow really sees his faults and wants to do something about them, it's never too late.

JOE: My wife was right! She told me once that I'd probably find out some day just how big a bastard I really am. Now, I know why she left me!

MACK: Oh, separated from your wife? I didn't know.

JOE: Yeah, about six months now. She pulled out shortly after I went on this job. Said it had gone to my head, and you know—it's funny—but she said the same thing you did—that I wanted to BOSS and DRIVE people. You know, Johnnie, I believe I can straighten everything out—if you'll give me a chance.

MACK: It's not easy to stage a comeback, but you USED to be well-liked, Joe. I think you can DO it! Of course, you can't undo that Rogers mess. That's water over the dam, but I believe you're big enough to profit by it.

JOE: I'd like to try, Johnnie. You've made me realize a lot of things I never thought of before. I hate to look those men in the face now, but I'm going to do it and I'm going to try—

MACK: Now, look, Joe, none of your men know about our little talk here; and as far as I'm concerned, they needn't ever know. And Joe, about Mike Farrar—I believe you can get him to reconsider!

JOE: I hope I can; anyway, I'm going to try.

MACK: Good luck! And, Joe, don't forget, any time you'd like to come in for a chat, the door's open. I've always thought you had the right stuff, Joe, and I think you're going to prove it to me.

JOE: Okay, Johnnie, and THANKS. (*He exits.*)

(*Mack sits back. . . . Looks after him as he goes. . . . Mack seems to see the seeds he has planted take root in fertile soil. . . . He is obviously pleased with the results of his talk with Joe. . . . A smile*

crosses his face. He leans forward. . . . Takes phone. . . . Dials number. . . . There is a pause. . . .

MACK: Al? This is Mack. . . . I don't think we're going to have any more headaches about quality performance in 35. It may take a few days to see results but, well—I see signs! . . . What? . . . Oh, just got better acquainted with a fellow out there. But, look, Al, let's keep a close check. Let me know every day, will you? Swell. . . . Thanks, Al. (*Hangs up. Mack picks up a piece of paper from his desk. Paper is filled with notations. We can't read what it says, but from Mack's expression, we know it's filled with notations of things he has jotted down from time to time which he wanted to take up with Joe. The paper is of no more use. He crumples it and tosses it in wastebasket.*)

POLLY: (*Enters*) Johnnie, the men on that job analysis want to know if you can work with them now. They've been waiting quite a while.

MACK: Ask them to work in George's office for awhile, Polly. If they get stuck about something, they can call me. George and I are going to be busy, but it's all right to interrupt if you want anything.

(*Polly turns to go. George enters.*)

GEORGE: Well, if it isn't Little Eva! Say, Polly.

POLLY: Whatever it is, bloodhound, the answer is NO!

GEORGE: But, Polly, listen to me.

POLLY: Now look, wolf man, I've got work to do, and the answer is still NO! (*Starts to exit.*)

GEORGE: (*Angry*) Gee, whiz, can't you say anything but NO?

POLLY: (*Yells*) YES! (*Exits quickly.*)

MACK: (*Laughs*)

GEORGE: Huh! Smart gal! Hey! What the hell did you do to Joe? I just ran into him as I came through the shop, and he spoke like he was really glad to see me! What happened?

MACK: Oh, we just had a little talk, and I told him pretty straight just what I thought was wrong with his department.

GEORGE: Well, it looks like it's already begun to work! I was stalling around out there talking to one of the boys from downstairs, and I couldn't help watching Joe. He was like a different person.

MACK: What was he doing?

GEORGE: He was making the rounds and talking REAL FRIENDLY like to the men. Honest to Pete, I thought I was going nuts when he slapped one guy on the back and said, "Sure, that's fine!"

MACK: Good!

(*Lights start to dim on following speech. Should be completely out by end of speech.*)

GEORGE: Well, when I got over the first SHOCK, I went around to get a drink of water. (*Lights out*) Joe was coming back to his desk, and one of the men was with him. I heard Joe say—

(*Scene switches to Joe's office. Joe is heard talking before lights go up.*)

JOE: Come in, Mike, sit down! (*Lights begin coming up. Joe and Mike sit*) I'm glad you stopped me back there and called my attention to that machine. That's one big cause of our production trouble. Don't know why the hell I didn't get wise to that before.

MIKE: I tried to tell you, Joe, but—

JOE: Yeah, I know. I've been a blind, stupid fool, but . . . well, let's don't go into that. I KNOW NOW, so let's do something about it. You spoke about combining a couple of those operations in order to increase production.

MIKE: Yeah. You know the way that machine is set up now, I have to do one end of that shaft at a time. Taking the piece out, turning it around, and resetting the machine takes up time. Do you think it would be possible to put on another cutter? Then we could do both ends at the same time—making one operation do the work of the two we're now using.

JOE: Sounds good. I don't know if it will be practical, but I tell you what I'll do—I'll look into the matter and refer it to Johnnie for consideration.

MIKE: (*Rises*) Thanks, Joe. (*Starts to go*) Joe, I'm glad we're kinda getting together. You know, when you stopped to talk to me, I was feeling pretty low. But now, well I feel a lot better about, about . . . well everything. Well, . . . (*A little self-conscious*) I'd better get back. Thanks for taking care of that for me.

JOE: Ah, forget it! Say, Mike, you've got a little boy, haven't you?

MIKE: Yeah.

JOE: Is he in school yet?

MIKE: Oh, yes, he's in the second grade. And do you know that little fellow is smart as a tack. He come home the other night . . .

(*Lights out on scene.*)

(*Mack's voice is heard in opposite scene.*)

MACK: Yes sir, George, I believe that guy's on the right track at last! I only hope he has the courage to stick it out. It won't be easy!

GEORGE: You know, I have a hunch we won't have any more production problems in that department.

MACK: I hope not. The next few days will tell the tale. (*Phone rings*) Mack speaking! . . . Yes. . . . No, but I talked to him this morning. He's coming out about 2:30. . . . You are? . . . Good! . . . We'll be down right after 2:30. . . . You bet . . . and thanks a lot! (*Hangs up phone*) They approved purchase of that new machine.

GEORGE: Boy, that's swell! Are you going to get that extra attachment?

MACK: Not right away. We'll see how it works this way, and if we find we really need it, we can always get it later.

JOE: (*Enters and stands in doorway*) Busy, Johnnie?

MACK: No! Come in, Joe! (*Joe enters.*)

JOE: Sorry to barge in, but I wanted you to know that Farrar's going to stay.

MACK: That's fine, Joe, I'm glad to hear it. What happened?

JOE: Well, not much. I had a talk with him and admitted I'd been wrong about some things. Say, he's got a good idea. By changing his machine a little he says he can almost double his production. I must'a been blind or I would have seen it before. Well, anyway, he's going to stay; and, you know, Johnnie, I'm damned glad he is. You're right—he's a good man. Thanks a lot, Johnnie, for—everything. Well, I've got to get back. See you later! (*Exits.*)

GEORGE: Now, I've seen everything!

(*Phone rings.*)

MACK: (*Answers*) Mack speaking! Yeah? . . . No, not yet, but I've got a stock chaser out for it. . . . You have too? . . . It's bound

to be around. . . . (*Elmer enters*) . . . Wait a minute! . . . (*To Elmer*). . . . What you got there?

ELMER: Don't know. Is it yours? (*George springs up, looks at the stock, and sits down again.*)

MACK: It's what we've been looking all over hell's half acre for. Where did you get it?

ELMER: They've been doing some concrete job downstairs; and when they began mixing the stuff, they found a skid load of these things behind some cement bags.

GEORGE: Well, of all the—

ELMER: It don't belong down there—nobody knows what it is! I've been going 'round and 'round all over the place asking everybody "is this yours?"—but nobody wants it! Is it yours, Mr. Mack?

MACK: It sure is. . . . (*In phone*) Sorry to keep you waiting, but the lost has been found. . . . Downstairs . . . behind a stack of cement . . . better get that trucker on the ball, don't you think? . . . Okay. . . . Sure. . . . Thanks! (*Hangs up. To Elmer*) We'll send down for the stuff right away. Thanks a lot!

ELMER: Huh?

MACK: I said, thanks a lot!

ELMER: Oh yeah, sure! (*He exits.*)

MACK: Well, that's that!

GEORGE: You know, I'm getting hungry as hell!

NOTE: Play moves very rapidly from here on.

MACK: So am I (*Gets up from desk—takes hat*) Let's go!

POLLY: (*Enters*) Johnnie, the die on the number 3 press just broke. Can you come out right away?

MACK: Come on George! (*Starts to go.*)

LOU: (*Rushing into scene*) They said call the toolroom. It's holding everything up!

MACK: Call the toolroom, Polly. Find out if they have duplicate dies. Tell 'em to send a couple of men right away. And tell 'em to hurry! Come on George, let's go! (*Lou exits followed by Mack.*)

(*George hangs back just a little at door. Turns to Polly who is dialing the toolroom.*)

GEORGE: Say, gorgeous . . . will you—

POLLY: No, I won't! Now get going before I forget what Johnnie told me to do! (*In phone*) Toolroom? . . . Say, send some men right away to. . . . They are! Already? . . . Thanks! (*Hangs up*) . . . They want to be careful down there—they're getting too damned efficient!

MACK: (*Calls from off stage*) Hey, George!

GEORGE: (*Crosses to door—turns*) Polly—

POLLY: (*Almost yells at him*) NO!

(*Lights out*)

THE END

STUDY GUIDE TO BE USED WITH "O WOULD SOME POWER'

The questions in this study guide are designed to help you think through practical problems in human behavior as brought out in the play. There is not always a "right" or a "wrong" answer to these questions.

1. Is Mack a "perfect" foreman? List any of his mistakes you may have noticed in the play.
2. List some of Mack's techniques that indicate good foremanship.
3. Did Mack have George's complete cooperation? How could this be detected?
4. Mack obviously knew about Joe's dispute with Rogers at the time it happened. Should he have done anything about it then? If so, what?
5. How did such employees as Polly and Lou feel toward Mack? Why did they have such attitudes?
6. Now that Joe Martin has "seen the light," do you think that he will succeed? Why? List some of the things Mack should do in following up this case.
7. How well did Mack handle the problem of speaking to Joe in private? Would you have handled it differently?
8. Was Mack kidding himself when he hoped the situation in Joe's department would "straighten itself out"?
9. Did Mack practice his own advice to "know your men"? Put down at least one example.
10. Do you think Mack took proper action on the missing stock?
11. Was Mack a good listener? List a few incidents in which you think he was not.
12. What do you think of the advice Mack gave to Joe? Was it too "preachy"?

List of Motion Pictures and Filmstrips

The visual materials listed below and on the following pages can be used to supplement the material in this book. The list is comprehensive rather than selective, and we recommend that each film be reviewed before it is used, in order to determine its suitability for a particular group. Each film has been listed only once in relationship to the chapter to which it is most applicable. However, in many instances the same film may be used advantageously in the study of other chapters.

Both motion pictures and filmstrips are included in this list of visual materials, and the character of each one is indicated by the self-explanatory abbreviations MP or FS. Immediately following this identification is the name of the producer; and if the distributor is different from the producer, the name of the distributor follows the name of the producer. Abbreviations are used for names of producers and distributors: these abbreviations are identified in the list of producers and distributors (with their addresses) at the end of the bibliography. In most instances, the films used in this bibliography can be borrowed or rented from local or state 16mm film libraries.

Unless otherwise noted, the motion pictures are 16mm sound films, and the filmstrips are 35mm silent. The few motion pictures which are silent and the filmstrips which are sound are so identified.

The length of each film is indicated in minutes (min) or frames (fr).

CHAPTER ONE

The Whistle at Eaton Falls (Louis de Rochemont; Columbia; 32 min). Dramatizes an ugly industrial crisis between labor and management. Gives sympathetic treatment to problems of both sides.

Strange Interview (MP; GM; 55 min). Owner of a small plant sees production falling off and quality of work going down; decides

to enforce rigid discipline and sacrifices personal warmth and understanding. Problems become worse until Benjamin Franklin, in a dream sequence, convinces him that human relations are most important.

CHAPTER TWO

Mr. Stuart Answers the Question (MP; USDC/UWF; 34 min). Owner of small retail store, with cooperation and assistance of his employees, improves selling practices and increases sales.

New Pattern (MP; CNFB/Brandon; 14 min). Operation of a labor-management production committee, and its activities in solving problems arising in the construction of an airport in England.

Partners in Production (MP; CNFB/Brandon; 28 min). Different kinds of labor-management committees, and the methods used to ensure that workers and management become partners in production.

CHAPTER THREE

Every Minute Counts (MP; USOE/UWF; 10 min). Problems of Hal Findlay, a new supervisor, in handling lateness, loafing, and absenteeism; and how he learns to deal with individual cases. (Problems in Supervision series.)

A New Supervisor Takes a Look at His Job (MP; USOE/UWF; 13 min). Bill Todd, machine-tool operator, is made a group leader, and his plant superintendent explains to him, through dramatized illustrations, the meaning of working with people instead of machines. (Problems in Supervision series.)

People Are All Alike (FS; NSC; 119 fr with disc). Explains that all normal people have the same basic wants; how supervisors can satisfy these wants. Cartoons. (Human Factors in Safety series no. 3.)

People Are Different (FS; NSC; with disc). Differences of people in personality, ability, and background; how supervisors must make allowances for these differences. Cartoon. (Human Factors in Supervision series no. 4.)

The Secret of Supervision (FS; NSC; 106 fr with disc). Why workers like one supervisor, resent another; art of handling people. (Human Factors in Safety series no. 1.)

Supervising Women Workers (MP; USOE/UWF; 11 min). Frank Brooks, plant manager, advises Joe Haley, foreman, to remember that women workers haven't the same industrial experience as men and very often have more home responsibilities, and to take these facts into account in his supervision. (Problems in Supervision series.)

CHAPTER FOUR

The Boss Didn't Say Good Morning (MP; MGM/TFC; 11 min). Story about the psychological effect a boss's failure to say good morning has on an employee. Somewhat exaggerated situation, but makes its point that everyday matters are extremely important in human relationships.

Establishing Working Relations for the Disabled Worker (MP, USOE/UWF; 14 min). Dramatized case study of workers being oversolicitous of a new one-handed lathe operator, of his resentment at being considered a "freak," and of the supervisor's successful handling of the situation. (Problems in Supervision series.)

Maintaining Workers' Interest (MP; USOE/UWF; 13 min). Dramatized instances of employees doing poor work because their jobs do not interest them, and what the supervisor should do to detect and remedy such situations. (Problems in Supervision series.)

CHAPTER FIVE

Fair and Cool (FS; Jam; 67 fr with disc, 15 min). Suggestions for handling men and situations by avoiding arguments, being fair, and keeping one's temper controlled.

CHAPTER SIX

Of Pups and Puzzles (MP; MGM/TFC; 11 min). Study in individual differences and techniques to be followed in fitting applicants to positions where they are most useful. Narrated by John Nesbit.

Placing the Right Man on the Job (MP; USOE/UWF; 13 min). Dramatized cases of five different workers, unsatisfactory in particular jobs, who are reassigned to other jobs more suitable to their abilities and capacities. (Problems in Supervision series.)

CHAPTER SEVEN

First Impressions (MP; USN/UWF; 21 min). Reasons why new employees may not like their jobs; primary steps in giving them a good first impression of their work.

Introducing the New Worker to His Job (MP; USOE/UWF; 16 min). Dramatization of how not to orient a new employee to get him started on the job; then by contrast, what should have been done. (Problems in Supervision series.)

New Men at Home (FS; Jam; 72 fr with disc, 15 min). Supervisor's obligations to a new employee, with suggestions on how to make him feel at home on the job to take pride in his work.

That New Job (FS; AT&T; 20 min). Importance of proper methods of introducing a new employee to his job and to his fellow employees.

CHAPTER EIGHT

Getting Ready to Instruct (FS; USN/UWF; 94 fr). How to prepare to teach a job; technique of job analysis; preparation of a plan for training.

Instructing the Blind Worker on the Job (MP; USOE/UWF; 17 min). How a supervisor trains Fred Bates, blind worker, to operate a drill press. (Problems in Supervision series.)

Instructing the Disabled Worker on the Job (MP; USOE/UWF; 14 min). Dramatized instances of poor and good instruction of disabled workers, and how, in the latter case, a one-armed worker learns successfully to operate a drill press. (Problems in Supervision series.)

Instructing the Worker on the Job (MP; USOE/UWF; 14 min). Dramatization of how not to instruct a new worker and the

results of poor on-the-job instruction; in contrast, how such instruction should be done. (Problems in Supervision series.)

Teaching Safety on the Job (FS; NSC; 121 fr with disc). How to prepare and give instruction in job safety—four steps: prepare, present, apply, test. (Human Factors in Supervision series no. 2.)

Using Visual Aids in Training (MP; USOE/UWF; 14 min). An instructor follows a carefully planned procedure involving the use of a training motion picture, a coordinated filmstrip, and an instructor's manual. (Problems in Supervision series.)

CHAPTER NINE

Developing Cooperation (MP; USN/UWF; 15 min). Right and wrong ways to supervise; developing cooperation among workers.

Discipline: Giving Orders (MP; USN/UWF; 15 min). Stresses the importance of disciplining a person properly and of giving orders clearly.

Discipline: Reprimanding (MP; USN/UWF; 10 min). Examples of proper and improper reprimanding by supervisors.

Human Relations in Supervision (FS; Arm Cork/McGraw). Series of 24 sound filmstrips, each filmstrip accompanied by a 12-inch 33⅓ rpm recording with a playing time of approximately 10 minutes. Each filmstrip presents a case study of a particular supervisory problem and poses the question to the audience: What would you do? Following are the titles of the individual filmstrips and the subjects.

Case No.	*Title*	*Subject*
1	Mary Benson	Insubordination
2	A Difference of Opinion	Among Supervisors
3	Independent Sadie	Insubordination
4	Tom, Dick, and Harry	Speed-up Claimed by Union
5	Paul Steele	Insubordination Backed by Union
6	Joe and Bob	Poor Cooperation between Supervisors

Case No.	*Title*	*Subject*
7	Alice, Jane, and Agnes	Work Assignments
8	Al Miller	Practical Joker
9	Harry Carey	Supervisory Responsibility
10	George Gray	Disgruntled, Insubordinate Employee
11	Lefty Laws	Incompetent Employee
12	Sarah Blake	Tardy Employee
13	John Beaver	Tardy Supervisor
14	Abbie Swartz	Conflicting Orders on Rule Enforcement
15	Tessie Teller	Slowdown Ordered by Union
16	Dewey Jones	Poor Leadership
17	Frances Moore	Interdepartmental Assistance
18	Bob Smith	Poor Work Habits
19	Jake Diller	Physical Handicap
20	The Three Calendeers	Boondoggling
21	Emma Trimble	Training for Flexibility
22	Jerry Cooper	A.W.O.L.
23	Jim Halsey	Violation of Safety Rules
24	Mike and Bill	Friction Between Employees

Maintaining Good Working Conditions (MP; USOE/UWF; 9 min). Two supervisors, Larry Daniels and Joe Graff, describe specific ways, dramatically re-enacted, they used in improving working conditions. (Problems in Supervision series.)

Maintaining Quality Standards (MP; USOE/UWF; 10 min). Bert Boudler, a supervisor, learns that quality as well as quantity production is necessary; and how such quality standards can be achieved and maintained. (Problems in Supervision series.)

Supervising Workers on the Job (MP; USOE/UWF; 10 min). Dramatized incidents illustrating good and poor methods of supervision, including the necessity of obtaining the confidence of workers and the dangers of "snoopervising." (Problems in Supervision series.)

CHAPTER ELEVEN

A Fair Wage by Job Evaluation (FS; NFI; 90 fr with disc, 15 min). Basic principles of job evaluation.

The Flow Process Chart and How to Use It (MP; OSRD/UWF; 15 min). How to prepare a flow process chart for use in the study and application of work simplification.

Improving the Job (MP; USOE/UWF; 9 min). Bill Downey's supervisor asks him for work-improvement suggestions; Bill talks the problem over with his father and sister, obtains their advice, and makes some worth-while suggestions. (Problems in Supervision series.)

Mighty Labors (MP; Ind Eng Col; 32 min). Explains industrial engineering including time-study methods, job evaluation, process charting, and wage incentives.

Planning and Laying Out Work (MP; USOE/UWF; 10 min). Jeff Harris, plant supervisor, recounts several examples of the necessity of planning a job in advance. (Problems in Supervision series.)

Principles and Interest (FS; NSC; with disc, 20 min). Suggested program for supervisors, to include: (1) Inspect plant for hazards; (2) study the jobs; (3) instruct for job safety; (4) develop active program to keep employees interested in safety.

Production with Safety (FS; NSC; with disc, 20 min). Accident prevention methods with main emphasis upon the proper training of employees.

Safety for Sale (FS; Jam; 74 fr with disc, 15 min). Responsibility for and importance of a continuous safety program; methods of conducting such a program.

Safety in the Shop (MP; USOE/UWF; 12 min). Three dramatized instances of shop accidents and their relationship to poor supervisory practices. (Problems in Supervision series.)

Teamwork for Safety (FS; NSC; 116 fr with disc). Ways for supervisors to make safety interesting and important to employees. (Human Factors in Safety series No. 5.)

CHAPTER TWELVE

Big Little Things (FS; Jam; 78 fr with disc, 15 min). General principles of handling ideas, suggestions, complaints, and grievances. Stresses importance of handling little things before they become big.

CHAPTER THIRTEEN

Counseling—Its Tools and Techniques (MP; VGF; 22 min). Shows a well-trained counselor at work—his tools and techniques and their use in practical situations.

CHAPTER FOURTEEN

Preparing for the Future (FS; Jam; 65 fr and disc, 15 min). Importance of preparing qualified understudies; suggestions for selection and training of understudies.

CHAPTER FIFTEEN

The Supervisor as a Leader. Part 1 (MP; USOE/UWF; 14 min). Four dramatized episodes illustrating poor supervisory practices and the importance of the following rules: Always keep promises. Never take credit for someone else's work. Don't pass the buck. Don't play favorites. (Problems in Supervision series.)

The Supervisor as a Leader. Part 2 (MP; USOE/UWF; 13 min). Four more dramatized instances of poor supervision leading to the following generalizations: Be a leader, not an authoritarian. Show appreciation for a job well done. Do not become angry. Protect the rights and feelings of workers. (Problems in Supervision series.)

Working with other Supervisors (MP; USOE/UWF; 8 min). Larry Daniels fails as a supervisor because he does not recognize the importance of working harmoniously with other people, particularly with his fellow supervisors. (Problems in Supervision series.)

SOURCES OF FILMS LISTED

AT&T—American Telephone and Telegraph Co., 195 Broadway, New York 7, N.Y.

Brandon—Brandon Films, Inc., 200 West 57th St., New York 19, N.Y.

CNFB—Canadian National Film Board, 1270 Avenue of the Americas, New York, N.Y.

GM—General Motors Corp., Film Distribution Section, 3044 West Grand Blvd., Detroit 2, Mich.; 405 Montgomery St., San Francisco 4, Calif.

Ind Eng Col—Industrial Engineering College, 3309 West Washington Blvd., Chicago 24, Ill.

Jam—Jam Handy Organization, 2900 East Grand Blvd., Detroit 11, Mich.

McGraw—McGraw-Hill Book Co., Text-Film Department, 330 West 42nd St., New York 18, N.Y.

MGM—Metro-Goldwyn-Mayer, Hollywood, Calif.
Films distributed by Teaching Film Custodians.

NFI—National Foremen's Institute, Inc., 100 Garfield Ave., New London, Conn.

NSC—National Safety Council, Inc., 20 North Wacker Drive, Chicago 6, Ill.

OSRD—U.S. Office of Scientific Research and Development (now terminated).
Film distributed by United World Films.

TFC—Teaching Film Custodians, Inc., 25 West 43rd St., New York 18, N.Y.

USDC—U.S. Department of Commerce, Washington 25, D.C.
Film distributed by United World Films.

USN—U.S. Department of the Navy, Washington 25, D.C.
Films distributed by United World Films.

USOE—U.S. Office of Education, Washington 25, D.C.
Films distributed by United World Films.

UWF—United World Films, Inc., 1445 Park Ave., New York 29, N.Y.

VGF—Vocational Guidance Films, Inc., 215 East 3rd St., Des Moines 9, Iowa.

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