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THE PERSON
OR
THE SIGNIFICANCE
OF MAN

THE PERSON

OR

THE SIGNIFICANCE OF MAN

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TO MY FRIENDS

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Foreword

FROM before the days of Heraclitus the Greek, the Western World has sought to break the matrix of Oriental absolutism from which it was born. Heraclitus was an innovator, and in contrast to the prevailing concept of a static universe, he held all things to be in continuous change. This viewpoint became the basis of the rising scientific hypotheses that now began to engage the West, and came to represent the renovating spirit of progress and democracy which has characterized its civilization. Heraclitus was also the first of the Greeks to describe the person as having a central place in the world of phenomena. In the eternal flux of things, individual phenomena took on new importance, scientific progress became possible, and the person began to be considered in the world picture.

The prophetic movement in Judea, which reached its climax in the Founder of Christianity, gave new meaning to this emphasis by stressing the intrinsic worth of the person, but the older totalitarianism of the East, with its concept of social and political organizations headed up in an Oriental despot, was late in being sloughed off. Before this could be done, Plato had already set his mark on Christian theology through the influence of the Alexandrian School upon the early Fathers in the exaggerated Oriental form of neo-Platonism. Plato had been turned away from the crude type of Greek democracy by reason of the fate of Socrates at the hands of the Demos. Naturally aristocratic in sympathy, his *Republic* became the prototype of succeeding utopias and communisms. Early Christian theologies, formulated by men trained in the Platonic tradition, became dominated by totalitarian and absolutistic concepts.

The first great recovery of the Western tradition of democracy and personalism came with the revival of Aristotle by the Christian world. Aristotle was the great exponent of individualism. The real was to him not an Ineffable Idea from which all things emanated, but was rather, the individuals who made the Idea meaningful. The real was not the class which made possible and supported the individual, but it was individuals that constituted the class. The upshot of this conclusion was inevitably toward democracy. Institutions were dependent upon persons, and not persons upon institutions. This turning toward democracy was already inherent in the prophetic movement of Judaism, as well as in the Christian system, but

it had been glossed and hidden in the one by the priestly hierarchy and in the other by the neo-Platonic theology. The great light that reinstituted personalism and democracy was Thomas Aquinas. From his more liberal teaching flowed the springtide of a new democracy, slow indeed to realize itself, but finding expression in such movements as Franciscanism, the Reformation, and the Counter Reformation.

The forces of totalitarianism and democracy, so long in conflict, may now be in their last great struggle, and the outcome involves the survival of Christian personalistic culture, or its supplanting by Oriental absolutism. The recent line-up of modern combatants was significant. In Germany the ancient democracies of the Germanic tribes, limited to election of the strongest warrior of the clan, gave way to wholesale despotism under democratic forms. The autocratic sympathies of Luther, who could be ruthless toward the common people, the revival of absolutism in German philosophy, witnessed in the writings of Goethe, Fichte, Hegel, Nietzsche, Marx, Spengler, and Hitler, show a common complexion.

In Russia long centuries of Czarist despotism assured an initial regimentation as an essential prelude to democracy, but the primary achievement of the Russian Revolution was very great, though still fettered by an inborn Orientalism, now in the saddle.

In China contacts with the West led to the overthrow of all but the last of the absolute monarchies, and the autonomous village system as well as the educational tradition prepared for the reception of democratic ideals, but temporarily totalitarian.

Into this condition of affairs the new scientific discoveries come as an additional ferment of change. For science, long dependent upon the concept of the monism of matter, corresponding analogously to the political monism of autocracy in the state, the theological monism of infallible institutions and dogmas, and the monism of the absolute in philosophy, has now reverted in its basic ideas to the principles enunciated by Heraclitus, the changing and personal nature of reality. It thus finds itself in a new and surprising rapport with the principles of Hebrew prophetism and early Christianity. The revolution that has taken place in scientific ideology in connection with the discoveries that cluster about the doctrine of relativity, on the one hand, and the role of dissymmetry in biogenetics, on the other, is so world-shaking in its implications that as yet modern thought is neither scientifically nor religiously prepared to make use of the new opportunity for mutual understanding. The trickle of small streams, however, from various

sources is becoming a full tide, with the center of interest in the person, whose inner world is now seen to be the world of important realities and the field of future inquiries. The person as the center of reality, and bearing within himself the meaning of the Cosmos, is the distinctive discovery of Western culture. Because it is so elemental to the interpretation of the world, it can find response also in the heart of a wearied and buffeted Orientalism, and can become the basis of new understanding between East and West. Because of its common human appeal, recognition of the intrinsic worth of every person is the foundation of democracy and the source of any ultimate world understanding.

This book is not written under the impression that it is the final word, either in philosophy or in personalism. We stand only at the beginning of a development that may travel far. It is written as the expression of a movement that daily gains strength and calls for clarification and definition. Certain movements in philosophy have sprung from the genius of a single active mind but which have proved limited and local in application. There are others that seem to spring spontaneously from many sources when the times are ripe, rising like the ground swell of the sea. Personalism gives evidence of being such an activity. It could appear in power only when a world of shrinking time-space calls for new simplifications, a common principle, supreme over nationalisms, races, or languages. Personalism offers such a principle in its doctrine of the intrinsic sanctity of every personality which alone can ground a true democracy. It goes further than this, however, in seeking in personal experience, not only the meaning of reality, but the ground of universal cooperation in government, in society, and in religion. Its fulness is represented in Christianity, though not in ecclesiasticism and dogma, but in Christianity as a universal faith embracing all men of good will who seek after God and who find Him in the secret places of their own souls, such a faith as was expressed by St. Augustine:

> That which is called the Christian religion existed among the ancients and never did not exist, from the beginning of the human race until Christ came in the flesh, at which time the true religion, which already existed, began to be called Christianity.—*Lib. de Vera Religione*

Because of the universal nature of true religion we must be prepared to recognize it in many voices, times, and places. It could only become commanding in a world made small by modern discovery, so small that the forces that threaten present the alternatives of

universal understanding or universal destruction. Personalism as the philosophy of such a universalism has always existed, but could act as a catalyst only in the fulness of time.

The present work is a response to continuing requests for a reissue of *Creative Personality* published twenty-five years ago. So many changes have taken place that it seemed better to rearrange, rewrite, delete, and add rather than to reprint. This volume is a grateful recognition of the continued interest of friends and is humbly presented in response to their encouragement.

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THE AUTHOR

I

THE PERSON

"—the only substance in a universe of shadows"

CHAPTER I

"My Strip of Blue"

My window keeps for me
A glimpse of blue immensity,
A little strip of sea.
—LUCY LARCOM

THERE ARE many aspects, as there are approaches to the study of reality. It matters little with what self-consistent or rational theory we approach nature, she is certain to answer back in kind with some knowledge. All approaches have to be made, however, through the experiences of human consciousness; all, however varied in result, are stamped with the hallmark of the interpreter. It may well be a source of wonder that with such diverse fundamental assumptions, nature should appear so accommodating in informing us, but not if we reflect upon the fact that the human mind itself is a part of that nature which it essays to interpret As itself a product of nature, its normal workings insure its capacity to achieve some truth, no matter by what means or in what direction it seeks. In the realm of human thought we are never free from human implications and, when all is said and done, can never be more sure of our universe than we are of ourselves, of our own existence, of the validity of our own experiences. Within the self is the ultimate, uncontrovertible phenomenon. Many have pretended to escape the shadow of their own minds, to find refuge in some Absolute, but in vain. Neither the Absolutes of Space, Time nor Matter with which the scientist beguiles himself, nor the Absolute Idea or Reason of the philosopher, nor the infallibilities of a Divine Absolute by which the theologian has bolstered his dogma; none of these has cleared from man this fateful "shadow that walks by him still," the necessity for individual judgment of what is true. Each in its own field has, at one time or another laid exclusive claim to enlightenment. Each has at some time been denied by the others. Let us inquire into these various aspects of the approach to reality, for truths appear to be of many kinds. There are facts of the material world as substantial at least as the rock which Doctor Johnson contemptuously kicked to disprove the philosophy of Bishop Berkeley; there are facts which Plotinus declared to be the field of philosophy,

"the things that matter most"; and there are facts like righteousness, love, and self-sacrifice, in the tenuously considered realm of religion, which however immaterial, have changed the direction and aspirations of human society and of individuals without number.

As to reality, let us put the pragmatic test that anything is real which may be said to make any discernible difference. Whatever falls outside this definition is beyond consciousness.

In spite of the modern distrust of dogma, the very beginning of knowledge, the fundamental assumption on which alone it can proceed, must be some sort of a dogma, even if it is no more than a belief in our intellectual capacity to understand our world. Without this primary article of faith, learning is impossible. This initial doorway to all knowledge exists as an assumption within the inner consciousness of man, and is the earliest and most direct experience of which he is the possessor. Since he must see all things through the narrow window of personal experience, there is little reason why he should consider the various branches as separated, in the sense that one can be held as inconsistent with another. If man cannot find unity in the world of reality into which he looks, he should assume the source of discord to be within himself, some shortcoming or atrophy of power, like that of the color-blind who cannot determine pink from mauve. Though there be no such reality as mauve for him the wise man will not deny the experience of those with better eyes. In like manner the unbeliever has no reason to deny the possibility of the experience of God when witnessed by creditable and substantial men. Apparent incongruity might well be the effect of some moral or intellectual shortsightedness which leads the individual to interpret experience in keeping with certain prejudices, desires, or imagined interests. Very few of us are as intent upon the truth, the whole truth, and nothing but the truth, as we are in a truth sufficiently partial as to confirm our cherished prejudices.

Even in the physical world, what we see can never be entirely separated from what we are, nor is any man so completely unselfed as to be able to look into the world altogether impersonally. To think so is only self-deception. The little window of human personality through which all knowledge comes, is not unlike "the strip of blue" of Lucy Larcom's window through which came her understanding of the wide world outside.

Any study of man in his world relations, begins then with the dogma of self, the rationality of human experience, belief in the validity of personal interpretations of reality. As he must create out

of his sensations a world of meaning, of which he can be no more certain that he is of himself, he must, if consistent, include the possible reality of the revelations to his inner spirit. The distinctions we make between science, philosophy, and religion are the different aspects under which we momentarily choose to consider the world of reality; differences which the mind sets up for its own convenience, somewhat as the engraver shuts out with the meniscus all but a narrow space of vision, for more effective work. The seamless world of total reality is still there whenever he chooses to remove the glass from his eye. Limiting for the moment his field of vision does not call for the denial of a larger world of possibility and fact, nor does what he discovers under the glass negate the larger universe of reality. If then we speak of windows into reality, let us remember that the windows of science, of philosophy, and of religion, are but the divisions of the one window of personal experience through which all knowledge must come.

The Window of Science

Science approaches reality through the medium of temporal and spatial experience. This is a legitimate limitation of its field which it makes in the interest of clarity. It asks the question of what we may know of physical reality from the standpoint of physical relations and measurements. It should never be condemned for sticking to its selected field and maintaining silence with respect to philosophy and religion, just as in those fields it is required to start with a necessary dogma or assumption. The scientist assumes first, the intelligibility of a world which is in striking contrast to the nature of his mental processes. He thus assumes at a stroke the whole problem of epistemology. His second dogma is a metaphysical one: the assumption of the existence of universal laws of nature, which dogma is particularly vulnerable in the face of any example of contingency. Both these dogmas are now under fire from the ranks of the scientists themselves who, for the first time in scientific history feel called upon to examine their primary assumptions. Science now shows dissatisfaction with its former dogmas as, in its examination of the atom, it trembles precariously on the brink of metaphysics. Perhaps in the future the best defense that may be made for unprovable scientific dogmas will be like the best defense of philosophical and theological dogmas, the pragmatic one: true in the degree of practical value to humanity. This has indeed been achieved already in the recent suggestion of one scientist that the validity of physical phenomena is to be established by their com-

municability.[1] This assumption leaves the materialist hanging by his own bootstraps.

Under the circumstances of its own limitations, we cannot expect science, on the physical basis, to yield us more than physical explanation. Its method is measurement, its tool is mathematics, and its test is predictability of physical events. So long as it remains within its field, science, both in methods and results, is above criticism from either philosophy or religion. Neither can it be placed on trial for its demonstrated findings. The valid criticisms of science arise when it goes outside its field, forgets the limitations under which it has elected to work, and without philosophical acumen or religious insight adopts the unjustifiable dogma that no reality exists outside its own narrow purview, or can be disclosed except by its methods. Such assertions are not only arrogant but unscientific also, and have brought some scientists into just and well-earned disrepute. In this their fulminations are on a par with those of the philosophic subjectivist or of the theological intuitionist who denounces scientific facts.

The limitation of science to that portion of reality which is manifested in the measurement of matter and motion, or whatever in the new physics might be included in these terms, raises three insuperable difficulties which are respectively, the metaphysical, the epistemological, and the religious. These conspire to indicate the incompleteness of the scientific picture of reality. If the scientist assumes the autonomy of nature, his mechanistic explanation cannot hold, since he must posit an inner magic by which the unique "emerges"; that is, in order to evolve, two plus two must on certain occasions equal five.[2] Such an assumption may be granted as true but can in no sense be considered explanatory. An autonomous Nature is not one that achieves results by reaction to external forces alone. On the question of epistemology we are even more at sea. Science has done, and can do nothing, to clear up the field of how we must think reality in the physical world. The more it has actually discovered about physical reality, the less certain has it been of the terms under which it could describe the external world. Now the leading scientists confess that present descriptions of ultimate reality are "mental constructs," or what Borden Parker Bowne described two generations ago as "unpicturable notions of the

[1]See Johnson: *Art and Scientific Thought.* Columbia, 1949.

[2]If there is an evolution, the appearance of new species, it can only be by the arrival of something not hitherto present. Causes present are represented by two plus two, but the effect, in the case of evolution, is something more than their sum or there is no advance.

understanding." On the third count, science has failed to tell us anything about "the things that matter most," so if we were to miss the whole of scientific explanation we should still remain in possession of those things most worth while for human experience.

Under these circumstances the present modesty of science, in some quarters, is becoming and in striking contrast to the claims made for it by its less-enlightened members and its philosophical camp followers. This is not to depreciate its values nor to deny its facts, but simply to call attention to the limitations of the space-time phenomena which provide the charter under which it has elected to work. Since, in its world of investigation, science has chosen sometimes to act as though the spectator did not exist, it is now embarrassed by the discovery of a reality in which it finds the spectator must be considered an essential factor.

The Window of Philosophy

Philosophy will not universally be granted to be a window from which we may look out upon or into reality. Certainly not by such as deny the validity of values or overlook the operations of the human mind essential to all knowing. That this is so must be held to be largely the fault of the materialistic and naturalistic philosophers who for some time past have been industriously engaged in sawing off the philosophical limb on which they were sitting.

It may perhaps be admitted that we have happened upon a time when the market for rational coherence, the demand for reason, is at low ebb. The man of the street seems to cling to the idea that humbug furnishes a good platform for success, and his credulity regarding irrational measures verges on the pathetic. For this he can scarcely be blamed when even in the seats of philosophy there has been so much depreciation of systematic thinking, so much encouragement given to fragmentary, self-canceling concepts.

Philosophy, like science, starts with the dogma of the intelligibility of the real. It presumes as well that the outlook, previous education, prejudice of the observer make a difference with the observer's concept of reality. Philosophy therefore believes that we should apply the test of coherence to our concepts. This is done by assuming a coherent universe somewhat after the manner of science's universal law, and altogether according to the new scientific assumption that the real is validated by its "communicability." The philosopher proposes to approach reality from the standpoint of what is logically coherent, unless he is altogether a skeptic or an anarchist. The only real charter the philosopher has for this ap-

proach to reality is the one the scientist has previously left out of his, namely, the existence of the spectator himself as a portion of the phenomena of nature which must also be accounted for in any true tale of reality. Since the interpreting mind is itself a part of nature, the philosopher declares himself on the importance of the intelligent mind in the apprehension of an intelligible nature. In other words, he bases the intelligibility of nature on intelligence in man. Both man and nature arising from the same source and forming a part of the same process he holds cannot be in fundamental contradiction or disagreement. To deny this is to assume that knowledge is impossible, but if it is true, coherence has validity as a test of reality and philosophy has a ground for speculation.

It may be urged that this approach is purely epistemological and in no way involves metaphysics. Reflection will show, however, that our answer to the problems of thought will depend upon our metaphysical assumptions. Is the external world amenable to thought, or does it simply write thoughts on the empty tablet of the mind? This is, of course, a crucial question in philosophy. If we adopt the first alternative, we have still a charter for philosophy; if the second, we have none, since the spectator is left out of the picture. This conclusion will not be obvious to either absolutist or monist, since each is habituated to living with certain inconsistencies. The absolutist is committed to a view out of keeping with the divine character of a God who cares for man and is overthrown by the problem of evil; the monist finds it impossible to meet the problem of error. A God who creates does by that act impose upon Himself certain limitations of expression and experience. In creating and communicating with man He surrenders His absoluteness in order to permit moral choices in men, and with these, the possibility of evil. The monist, if consistent, must grant equal validity to all sense impressions. He is set upon to explain disagreements in understanding that are the results of identical experiences.

The Window of Religion

The average person of intelligence is not satisfied with seeing the world of reality through the windows of science and philosophy alone. Even the most rabid opponents of religion, instead of neglecting what they declare to be a myth, a legend, a superstition, spend a great deal of time and energy in reiteration of what, if their theories were true, would be obvious to all and deadened at a stroke. Yet they feel called upon to battle daily against these "specters" that never down, living wholly in negations and without any con-

structive suggestions of adequate substitutes for religion. The average man is convinced that so far he has been scientifically shown not more than half of the world of reality, and for his supreme values, it is the least important half. He sees certain great values that are not measurable by sense arithmetic, certain facts that are more than simple knowledge; these are those deeper facts, for which and by which he lives.

Thus the inquiring mind is inevitably, whether for or against, forced into the consideration of religion. If *for* it, he can justly claim to be talking about reality; if *against* it, he can only make the negative excuse that he is willing to waste his speech on nothing but a persistent illusion that still yields moral and spiritual results of value to society. To the normal man, since normality includes his spiritual as well as his physical inheritance, the supreme realities of life spring from love, loyalty, honesty, integrity, altruism, high-mindedness, fortitude, reverence for that which is better or greater than one's self, duty, obligation, social responsibility, respect for the rights of others, faith in the practicability and value of the good life, confidence in the friendliness of the universe, and an utter devotion of one's powers to the life of values. All these one may acknowledge as religious without claiming them to be a complete definition of religion. They form the field of religion, in some sense, of all religions. This will of course be violently denied by those to whom religion is merely an appeal to fear. As a matter of fact, there is only false religion where there is not love of values for themselves. Wherever there is love of these values in a man, however much he may protest his irreligion, he is religious. However faulty in accomplishment, however perverse in methods, the aim of religion is everywhere the same, the cultivation of the good life as the supremely worth-while reality.

Society has discovered that, to this end, the assumption of a dogma gets practical results, just as was true in science and philosophy. As the scientist proceeds on the undemonstrable dogma of laws, holding in every part of his undiscoverable universe, in spite of contingency and dependence upon statistical averages; as the mathematician depends on the elusive and contradictory dogma of infinite divisibility, ideas which Vaihinger called convenient mental fictions, so the religionist assumes a universe in which moral and spiritual values are at home. This concept he visualizes under the term "God," believing that these values, so far as the life of man is concerned, represent the highest form of reality. The test here again is the pragmatic one. If it turns out that devotion to these

higher concepts leads to a better life and society, to a larger achievement of values, and a growing appreciation of them, then the religionist is justified in his belief in the reality of God. The cogency of this belief is denied by some who do not see that, fundamentally, theism is a confidence in the moral order of the universe. Even if we resort to the scientific expedient of statistical verification, we shall, I think, have to admit that for the general run of men, the concept of God is of supreme pragmatic value and hence a justifiable assumption. It is, at least, a working proposition in the endeavor after a good life, and as such should be applauded by every lover of mankind.

We have here a field of reality which is, and cannot be proved or disproved by resort to scientific measurement. Honesty, which may be accounted a religious virtue, is *something*, even though it cannot be measured by a physical yardstick, or even marked down in terms of percentages. Index pointers of emotional psychology can be only of questionable avail, because they speak only of intensity of physical reactions to mental suggestions, reactions that vary with the sensitivity of the subject. A hardened criminal may be more likely to *pass* such an examination than a first offender. We have not invented a pointer that can distinguish between love and hate, or can indicate the mental and spiritual sources of the aberrations behind the needle of the lie detector. Neither can these realities be said to lie mainly in the field of rationality, for here we are in the region of paradox. Such paradoxes as the following are common: the presence of extreme physical suffering with extreme joy, as in the martyrs; the concomitance of external shame with inner self-assurance; the sense of external loss with confidence of inner gain. Here we have the whole realm of tragedy as represented in art and music. Why does the darkness of the background in the picture bring satisfaction by emphasizing the high lights? Why do the minors and purposeful discords in the music bring a satisfying fulness of expression, without which our minds grope unsatisfied? It is because in the region of values the paradoxical finds expression with which neither scientific measurement nor philosophical coherence can deal. One has to be endowed with a point of view, a platform of appreciation, a power of insight, to press through the world of casual appearances to the deeper reality. At this point, the fact that the believer in the phenomena of the external senses alone, or in rationality alone, can say "I do not see it," has no weight at all. He is like the man used as an illustration by a mechanistic colleague who criticized the person who hoped to get at the hidden

reality of the oil painting by rubbing his nose against it. The nose-rubbing scientist or philosopher will miss altogether the meaning of religion. But a platform of appreciation for religious understanding is no more essential than a corresponding preparation to understand scientifically the phenomena of nature.

The conclusion of these considerations might be summarized in certain likenesses and differences found in the exponents of the three sections of our window into reality. Each is compelled to make a fundamental assumption concerning the intelligibility of the universe. Each sets before himself a goal which is inconsistent with present achievement and which, if taken literally, could only be considered preposterous. These assumptions are the various absolutes, the conventional mental fictions without which we cannot advance. With science it is an absolute space-time world of universal law and predictability; with philosophy it is absolute Truth, or logical coherence; with religion it is an absolute person or God. Each of these terms contains a paradox preventing full intelligibility by a space-time-bound creature such as man. On the other hand, if he were altogether the creature of space and time he could not be conscious of these limitations and they could not torment him.

Each view has, at times, claimed for itself exclusive insight into reality, and yet each leaves its devotees inwardly dissatisfied by reason of the consciousness that something has, by the very claim of exclusiveness, been left out of the picture. For this reason, each has attempted to go beyond its fundamental assumptions, to speak for the others, to condemn conclusions considered inconsistent with its own. It is as if three groups of children, playing at three windows, should claim their own perspective to be the only true one, and that their view could be maintained only by denying all others. This situation arises from the fact that reality is approachable by three distinct methods, each of which is legitimate for the type of reality it seeks but can arrive only at such realities as properly lie within the scope of its method. In the use of its particular system there is a necessary orientation if there is to be understanding. This has led to contempt by proponents of the other fields. Orientation, mathematical and observational, is essential for the scientist. With the philosopher there must be a mastery of logic. With the religionist there must be a revelatory insight into spiritual values. The difficulty arises from the fact that however much we trichotomize our world for purposes of observation, the division is only academic, and none of us can be exclusively scientific, exclusively philosophic,

or exclusively religious. We are looking at one reality under three aspects, the better to appreciate it but the three cannot be absolutely dissociated.

There is, therefore, no point to the claim that our opponent has not grasped reality because it does not fall in with our scientific, philosophical, or religious approach. There is no value in our prejudice toward each other. No one can consistently hold that truths in one realm are at war with truth in another without abrogating his own fundamental thesis of universal reality. How futile then it is for either philosophy or religion to catch at the coattails of passing scientific methods, or for science to deny religious facts because they cannot be measured and weighed, or for religion to anathematize science or philosophy. The method should be fitted to the field of inquiry. Logical coherence is not to be judged by time-space measurement, nor are the upward reaches of the soul after a new life in God to be scouted as unreal because they are neither altogether coherent nor space-filling.

However various the methods by which we approach reality, there is one inevitable factor in each which has been resolutely overlooked. However much science in the interest of complete disinterestedness may have desired a universe without a spectator, "himself from self he could not free." A like fact has beset the most perfect syllogism of the philosopher. Coherence is ever relative to himself. The absolutes of religion have, after all, been something less than absolute in the understandings and interpretations of human and fallible beings. Only the Absolute can compass the Absolute. Each man must, in the final analysis, see and interpret the world through his own experience. Here he will see and understand the most, who keeps open and clean the windows of his own soul, with a minimum of arrogance regarding his own understanding, not denying the understanding of others but anxious for that truth which sets men free.

To the wise man in search of reality nothing human can be alien. These are the reasons why, if we are to understand our world, we must begin with the person. The world of science, so far as he can have any knowledge, is dependent upon personal reactions and interpretations which have their being, first of all, within himself. He is, himself, a part of any truth which he may possess. Any knowledge must include man's own nature and responses. This is the truth that has come home to modern science with a new force and is revolutionary in its implications.

To know is not enough. There is a demand for intellectual co-

herence with which only philosophy can satisfy the mind. Here again, the person is not only the judge of the coherence of his ideas, but his own personality affects the judgment, and cannot be separated from what he is, intellectually, morally, spiritually, and even physically.

Nor can religion claim independence of the individual person. However absolute his revelation, no revelation can go beyond his personal capacity to receive. Here also, the person must judge of God, and on his judgment rests his spiritual fate.

By all this it may be seen that man's attainment, the failure or success of civilization, the goal of his culture, must begin and must find itself prefigured in man himself. His own human nature is "the strip of blue" through which he interprets all experience.

CHAPTER II

The Animal Capable of Laughter

WAS IT ARISTOTLE who first defined the person as "the animal capable of laughter"? At any rate there was a keen insight behind the remark which was so appropriate that it stuck and has been constantly mulled over by other philosophers since Aristotle's day. The exact term "*persona*" was of Latin derivation, taken from the mask worn by the actor on the comic stage, to indicate to the audience the character of the speaker, though the honor must be shared with the tragic plays, as personality itself is a mingling of tragedy and comedy. The mask which was used to indicate the character of the speaker soon came to represent certain very definite personal qualities until all actors on the stage of life, as well as those in the theater, came to be known as "persons." The mask was so constructed as to form what we today would call a megaphone to enlarge the sound and extend the auditory circle. Sounding through the orifice of the mask in speech became synonymous with acting a part, and so we have the term "*per-sona*," "sounding through." The meaning that persisted was that of the type of personality represented, much as we speak of the "characters" on the stage. The person came thus to mean something more than an individual, and was invested with typical human qualities.

The Animal That Laughs at Himself

No sooner do we launch the proposition that the person may be defined as the animal that laughs, than we feel the necessity of going on with our definition to a still higher capacity, the ability to laugh at himself. Until this rung of the ladder of experience is achieved, something is wanting from the fulness of personality. Out of this proficiency springs the sense of the comic which betokens the presence of self-criticism that comes with the human consciousness and separates it from the animal consciousness. The animal is conscious but he cannot reflect upon his conscious states holding thoughts and inwardly comparing them, arriving at decisions that are wholly mental. The presence in man of this higher gift is indicative of a vaster leap in the evolution of nature than that from unconscious to conscious life, or even from the inorganic to the

organic. Though we reduce this leap to its lowest terms and call the appearance of the person a mere "sport" in the multitudinous changes of evolution, we cannot overlook the new world that came into being with the first creature that could think, reflect upon his desires, build new aspirations out of his experiences, and laugh at his own idiosyncrasies. Out of this capacity to laugh at himself arose the world of social, moral, political, and spiritual realities: laws, customs, traditions, literature, art, religion, science and democracy. Should there be any objection on the part of the materialistically minded to calling this a newly created world, we need only to remember that it is that part of the world which is utterly significant to the happiness and welfare of man. Here lie those distinctions in reality which separate a colony of white mice from human society at its highest and best. This difference is not blurred but only enhanced in meaning by pointing to a common physical origin for man and the anthropoid apes. If we claim to be realistic, let us be so and admit the real abyss that lies between the two orders of life and reality. This polar distinction is dramatized for us in the expression "the animal capable of laughter."

The late Professor Bergson in his work *Laughter* has very properly indicated that the basis of the comic lies in this power of self-criticism, the consciousness of the moment when human action becomes a pose, mechanical, separated from life, such as gestures that do not illustrate meaning, or habiliments that do not fit the work or the occasion. This power of higher criticism seems rare in dictators who rave in balcony speeches, or who invent the famous "goose-step" as a mark of the slavery of the multitudes and a means for the destruction of personal wills and activities. The lack of humor at this point indicates a low grade of civilization. The man too serious to laugh at himself not only gets laughed at, but he who can laugh only at others is but partly emergent into fully realized personhood. The meaning of laughter is that it springs from a human capacity to be aware of one's thoughts, ideals and conscious states, and to pass judgment upon them. This ability is basic to our human society.

The Person Is More Than Consciousness

The distinction has already been drawn between the animal and the human worlds in that the one is conscious while the other is conscious of consciousness. It is this latter accomplishment upon which we build our world of interpretations and meanings, not only for our inner experiences but of the outer world of reality as well.

We must then give some consideration to the fact that the person is more than consciousness.

The profound and practical nature of self-consciousness has seldom been widely understood or even generally appreciated within the limited fields of psychology and philosophy. This is because of the primary necessity of assuming a certain realism of the self-consciousness as the basis of knowledge and experience. To question the self-consciousness or selfhood is so fatal a skepticism that to be guilty of it would reflect upon our sanity. From the earliest period of consciousness we assume the reality of our selfhood, and to doubt it indicates abnormality. This reality is indeed never questioned from within. The question becomes formidable only when approached in a roundabout way. We start on the philosophic quest for reality with high hopes, but on premises that overlook the nature of selfhood, or even deny its factuality in the world of reality. We shortly find ourselves launched on a sea of difficulty. Nothing seems easier than to assume the reality of objective matter alone. It is as we see it and that seems to be the end of all controversy, until we begin to inquire into the nature of our inner experience. Then it becomes difficult to place the seemingly real qualities that objectivity presents. If we cling rigorously to our materialism we are soon driven to talk about a back-lying substratum which is not made up of, but throws off, qualities. The greenness of the grass, for instance, is that portion of the sun's rays not absorbed but reflected, which our optic nerves catch and interpret as greenness. Judged by what the grass keeps to itself, it has all the other colors of the light except green. Since the green is "in our eye" and not in the grass, we are driven to assume that substantial reality is something behind qualities that holds them or casts them off but whose real nature is unknowable. Thus we arrive by easy stages, and swift as well, at the conclusion that this "thing-in-itself" is the only reality and is unknowable. The products of mind and thought become illusion and shadow, and we are reduced to a complete skepticism like that of a noted physicist friend who confesses that he can make no affirmation about existence, including his own.

The question cannot long remain, however, in the arid region of philosophy and dialectic. The problem of the self takes on implications of a more practical nature. Suppose one assumes with the sensationalists that ideas are only the replica of an external world which sensations write upon the empty tablet of a passive mind, then the profoundly practical question of the reality of the self is raised. If there is a self, save that which is created by sensations, we

suddenly find ourselves at the mercy of circumstances. Men would have no choices, creative or moral, as many of the psychologists love to tell us, and with the coming of general belief in such doctrines we find not only our most precious world of human values imperiled, but with the departure of moral responsibility we discover the valuable institutions of society, law, order, and social obligation perishing also. Our own age is a notable victim of this type of thinking which persists in overlooking the nature of the person. A critical philosophy of self-consciousness, or personality, is then important to any system of human thought.

There are various theories of the person and only a few of them can be dealt with in this discussion. Let us consider first the claims of the sensationalist. Insofar as he feels it at all necessary to define selfhood he describes it as the sum of sensations. Here we discover the deceit of words to lie in the figurative term "sum." Even if we overlook the serious objections that a sum is not necessarily a unity, why should sensations be considered a sum? Sensations appear under the fleeting order of time and do not stay to constitute sums. They possess no existence independent of the person and the moment. They are in fleeting passage and before we can entirely grasp their meaning they are gone and are succeeded by others equally demanding interpretation. Some sensations will pass without even being noted because others hold dominant attention. This element of time the sensationalist quite overlooks. A "sum of sensations" calls for more than sensations, for they themselves are quickly gone and can never return or be reproduced. What is it that sets up a sum of sensations that are no longer in existence? A sum of sensations surviving the temporal flow would be impossible except to a continuing self to whom they are incidents of a wider experience gathered into a synthesis of rational meanings. Such interpretations of experience would be impossible if the person were but the sum of his sensations, because fleeting sensations, quickly displaced by others would not be conscious of each other nor of the whole sum. Reduced to such bare terms it is apparent that the sensationalist depends mainly upon the power of figures of speech. He is driven to picturing sensations as remaining after they are gone, as physical traces in the brain cells. He not only makes an unscientific assumption at this point, because he has no scientific evidences of "traces," but is further faced with the dilemma of showing what relation there would be between a trace and a sensation. Evidently he will swallow any mystery if only it avoids the admission of the mental and spiritual reality of selfhood.

A similar criticism holds of the more refined doctrine that the person is the sum of the states of consciousness. As the cruder sensationalism meets its fate when it faces the problems arising out of the nature of the experience of time, so the doctrine of the person, as states of consciousness, experiences difficulty arising out of the nature of relation. In a rational mind all states of consciousness, in order to produce unity of meaning, have to fall into an order of relation. Any particular state of consciousness, unless it be aware of other conscious states, would be incapable of finding and postulating an order of related meanings. But such an order of relations is always presented where there is normal selfhood. When it is not, we have insanity, and when it is but partially realized, we have what is called "split" personality.

These reflections bring us face to face with the fact of the self-referring nature of experience. A consciousness of duration is required which is neither found in sensations nor in states of consciousness, and which is something more than memory. Sensations and states of consciousness rise and pass across a stage of experience before a selfhood which watches and relates them into meaning as if it were both actor and spectator, for now and then it interferes with the action on the stage. It can even modify the sensations, heightening or depressing them to suit its own purposes. If sensations are necessary to a desired end, it has ways of arousing them. It is never more than partially the prey of sensations, and always where the personality is normally functioning, has power to direct, divert, or suppress. To call attention to these facts is easier than to explain them. The final explanation of the mystery of selfhood may be impossible but the facts mentioned are common experience which no one can reasonably deny. The entrance of this self-sufficient actor upon the state of consciousness is something other than memory, because memory of itself would be incapable of commanding some states of consciousness to action while suppressing others. Even the Freudian psychology while attempting to set up the "libido" as "dictator" with disastrous consequences to morality, is compelled to assume the power of the "censor" to inhibit undesired thoughts. If there is such a censor, we have the foundation for a psychology of the person. But whatever uses memories and conscious states for the suppression of such impulses as are not useful to its purposes can never be identified as being such memories and conscious states.

It is impossible at this point to avoid the question whether personality is a function of bodily activity, or whether the bodily func-

tions furnish the ground for self-activity. Whichever horn of the dilemma we choose will have compelling significance for our afterthoughts. The first of these viewpoints has been summed up in the classic assertion that "the brain secretes thoughts as the liver secretes bile." If this be so, one is evidently freed from responsibility for his mental condition, and an education should be simply a matter of pouring in information by the least painful method. Perhaps the suggestion of a dearly loved and honored former student might be apropos. He suggested that the victim of an education be read to while in a hypnotic state and so provided with a streamlined and painless education. Our own experience with sleeping pupils has not been encouraging but perhaps they did not get "fully under."

Another and perhaps happier view may be possible. Recalling the recognized importance of a self-directing ego, even to systems which deny any self-functioning personality, it is possible to view the bodily functions not as producing the person but as providing the field for personal activity. Such a view will at least be free from the necessity for depending upon a selfhood which by initial assumption it denies. The dependence of an impersonalistic psychology upon the assertion of the reality of the ego in one form or another, in order to make it a going concern, presents a grotesqueness apparent to all except the blindest worshipers of initial assumptions. If there is a power to inhibit the unpleasant, the painful, or the unprofitable in consciousness, there is also power of sublimation, as Freud claims, but also neglects, the power of turning the mind and experience toward that which is pleasant, profitable, and right. It is true that we hear in this type of psychology much about the dangers arising from inhibitions, and little about the duty of sublimation. Little would be left of Freudianism as a theory were it not for the more or less suppressed assumption of the reality of a self-active ego, or person, who is not by right the victim but the master of sensations. Out of the cloud of hostile considerations shines forth the encouraging truth that bodily functions are not the dictators of the person but that they provide the field of which he may be the conscious master.

It might well be admitted as a fact, true to human experience, that what we call the person builds up experience by his conscious reactions to the world without and within. Influenced by the world of sensations, played upon by impulses grounded in the physical functions, he still has power to bring these into subjection to his superior aims. He can, in contradiction to the claims of the behaviorist, command the body to act where the strongest physical impulses

rebel, compelling them like whipped dogs to lie in quiescence, or commanding them to turn their strength into the channels of his own purposes. No mechanistic psychology can account for the action of the soldier in World War I who saw his buddy in an agony of pain from liquid fire, and against the physical impulses of fear, against the command of his captain, and in the certitude of instant death, crept over the top to end his companion's sufferings. That lad displayed in the hour of trial the sublime reality of that which we call the person, which reacts to external impulse, and is the spectator of time and change, but has an existence of its own superior to all events. It is its own event. If we admit only sensory stimuli as being real, we cannot account for that self-command, which in such cases inhibits some impulses and releases others in the pursuit of rational and ethical values.

However much we may be moved by such facts of common experience, some will question the relation of self-consciousness to a normally functioning body. Nor can we avoid the yet more poignant question whether the self is so dependent upon the body that it will cease with it. Of course, whatever reason we cite in favor of belief in future existence will fall short of completeness, and in the end we shall be called upon to believe where we cannot see. We shall have no scientifically demonstrable facts with which to deal, but philosophy can introduce considerations which make belief reasonable. These considerations lie in the field of the time-and-space transcending nature of the person to be referred to later. It is true that personality expresses itself under the order of physical relations now, that being the order under which it is at present bound to express itself. Its superiority to the space-time processes of Nature, however, argues that these may not under other conditions be necessary to its self-expression. To the degree that it is not now subject to the physical order, it is not dependent upon it. That which is already superior to that order, may presumably survive when, for it, that order has passed away.

An even darker problem is the limitation which physical function seems to set on mental and moral achievement. There are those who because of inherited physical weakness seem incapable of moral mastery of themselves. Physical impulses gain control over them through the power of evil imagination or the failure of constructive good imagination. Here the materialist inflicts his finest scorn, but his argument holds only by overlooking the nature of moral values. If values are established within him by the struggle of the person for higher self-realization, the moral reality of even the weaker

may outshine the achievement of the strong in will who has no similar handicaps. The struggle itself represents a value. The developing personality is one that wins sturdily rather than the one that wins easily.

A final consideration claims attention: the unitary nature of self-consciousness. Self-consciousness as an entity is the assumption necessary to the solution of the problems raised. How this entity can partake of change, and yet survive change is, from the standpoint of logical explanation, an impenetrable mystery. As a fact of experience it is common to all. How the person keeps his self-identity through the complex changes wrought by time and mood is one of the supreme paradoxes. That this continuing identity is a fact none can reasonably deny. A certain integrity is characteristic of normal selfhood. Anything that breaks into the sense of continuity and self-identity weakens the centers of control and makes normality impossible. There is grave question whether the sense of self-identity is ever completely lost. In the case of Miss Beauchamp, as told by Dr. Morton Prince,[1] and in the later pamphlet written by her, we discover that while she gave herself over to the various moods or complexes called divided personalities, there was present at the beginning of each mood a conscious choice and the conviction that she ought not to "let herself become 'Sally,'" or any other of the dissociated personalities she from time to time assumed. Upon this essentially unseverable unity, in fact, hinged her recovery. By building up confidence in her power of self-control she was enabled to regain the integrity of her personality. This could never have come about in a personality composed merely of states of consciousness.

Who Laughs Best?

Out of this integrity or unity in the normal person grows the power of bringing the varied experiences of life into a synthesis of meaning, and the integrity is closely related to self-control. With this power over circumstances and moods comes laughter as an expression of intellectual freedom. The gift of laughter is a sign of mental health. A very old book[2] calls attention to the fact that the two poles of tragic drama are freedom within and necessity without. Comedy may be considered a reversal of this process, where necessity is falsely conceived as being within and the freedom without. The possession of laughable idiosyncrasies calls for the automatism of the college professor who has reduced a large field of activity

[1] *The Dissociation of a Personality*, Longmans Green, N. Y.

[2] Donaldson: *The Theatre of the Greeks*, Cambridge, 1836.

to the mechanical, in the interest of "higher and absorbing thought." Under the spur of what he has made an inner necessity, he greets the cow "good morning," and orders the weeping coed out of his path as an "ugly beast," being deeply absorbed in the mathematical theory of functions. As Bergson so clearly pointed out, from life we expect the normal activities of the living, and when these become mechanized, through habit, thoughtlessness, or sense of inner restraint, we have the appearance of the comic. The gift of laughter becomes thus the ally of the fuller life, the aid to personality. It does this by making the normal person aware of actions and habits that are merely perfunctory and do not partake of the deeper feelings. Many of the gestures of public speakers, grimaces of the face, often repeated to emphasize a variety of sentiments, become thus highly ridiculous. The pomposity which indicates self-consciousness in the wearing of uniforms or robes, the unnaturalness of the "goose-step," all these fall under the category of the comic. The capacity to become conscious of the aberrations from naturalness is the main corrective by which it is possible for the person to rid himself of insincerities. Its presence betokens also an intellectual freedom which is not bound by inner and enslaving constraints. Being able to laugh at one's own eccentricities is the first step toward reforming them, though we must frequently call to our aid those friends who dare to laugh in our faces.

The existence of the comic, then, calls for a certain duality in the person, in which one-half exposes and makes fun of the other half. Where this duality is submerged we have those comic persons who are finished egoists, like the clowns of the circus, acting in solemn-faced indifference to external criticism or laughter. As suggested by Bergson in the work already cited, comic situations arise when a person is not in full possession of himself through his own fault, or when he is unmindful of his true relation with the world around him. Art and comedy become then the aids to self-realization, self-adjustment, and self-understanding; the elements made necessary by our unawareness of our deeper selves and of other selves. Laughter becomes one of the main contributors to personal self-discipline. For the moment, the person stands apart from the world of external appearance, and also from the world of inner response, as both actor and spectator of the drama of life, with power to judge and to correct the action on the stage. There is something jarring there if we do not hear that which is in keeping with the unbroken melody of the life which should be. We become ridiculous only when we produce some outward note discordant with the inner self, and re-

peat it in self-possessed unconsciousness like some "shouting tenor" who is persistently off key without sensing it.

The power of self-criticism and laughter is the handmaid of perfecting personality, of progress, and of creativeness. We know people who take themselves with such seriousness that it becomes impossible for them to absorb new ideas, like the perfunctory performer who acts always according to set notions, the mechanical dancer too conscious of his feet, or the musician who belabors the keyboard. Until these activities become instinctive and natural there can be neither art nor creativeness, for both of these gifts spring out of the unhampered expression of life. Only those thus endowed can successfully launch wing on untried air, or venture safely on uncharted seas.

There is deeper meaning here also than applies only to personal development, freedom, and creativeness. Freedom to laugh is bound up with freedom in society. Only in dictatorships is it forbidden to make fun of those who take themselves so seriously that they would replace God.

CHAPTER III

The Danger of Thinking

PROFESSOR BOWNE used to tell the story of the pious lady who considered it dangerous to think, and who as the reason therefor quoted the text: "In such an hour as ye *think* not, the Son of Man cometh." By this she meant that serious thought would bring down the Day of Judgment, which she evidently feared. We may not be sure that the old lady was so much out of step with her own times. She certainly has many contemporaries who show signs of fear that a little straight thinking may bring down some sort of judgment. A member of Congress is reported as objecting to books for enlisted men, "because a book might change the whole course of a man's life." Thought is ever a dangerous weapon, much to be feared by the cohorts of special privilege and maintainers of the status quo. In other words, thought is revolutionary and there is no telling where it may lead us both in personal and in institutional life. James Allen once called attention to the fact that we are today where our thoughts have brought us. We shall be tomorrow exactly where our thoughts have taken us. We shall reap the harvest of our thoughts, no more, no less. We cannot escape the effect of our thinking any more than we can avoid the compulsions of the law of gravitation. If we love, we shall be loved, for love naturally attracts; if we hate we shall be disliked. If we merely daydream without putting purpose into our thinking, we shall end in a fruitless and disillusioned futility. The activity of the mind is bound up with the whole meaning and outcome of life, with creative effort and purpose. Since we go in the direction that our positive and constructive thoughts lead us, the more of work, purpose, and will we put into our thinking the richer will be our harvest of personality and life. Anyone then who would make a serious business of life and reach the more enduring satisfactions will bravely face the danger of thinking and by-pass the present popular moratorium on thought.

Thought and the Thinking-Muscle

It seems strange that one of the outstanding discoveries in the history of European thinking should for so many years have been so relatively neglected—that is, it is strange until one gives him-

self to the effort of understanding the various *Critiques* that came from the pen of Immanuel Kant. One of these most important contributions of the great German philosopher which has withstood the storms of time and discovery was the activity of the mind in all judgment. Even yet there are philosophers who cling to the implication that our thoughts are made for us by the external world of events and phenomena. But Kant's position has never been successfully controverted and grows in power with the ever-deepening understanding of the person.

There is still much confusion in terms and meaning, due sometimes to unclear thinking, sometimes, we fear, to obstinacy, and sometimes to the ease of referring thought to a basis in matter as an end to inconvenient questioning. While we may not pretend to solve all the mysteries of the relation between mind and brain, there are some facts that cannot be handily sidetracked. Thoughts are unlike the sensory stimuli which bear a part in their production, and these in turn are not like the physical objects involved in perception. In the common process of perceiving, at least two transformations take place; from things to sensations, and from sensations to ideas. Whatever smoke screens we throw up to hide the disparities between thoughts, sensations, and things by inventing systems of "monism," "pluralism," or "realism," the gaps become apparent the moment we attempt to describe the process of thinking. Peace is kept only by common consent to ignore the differences. There is nothing in the nerve-functioning of my fingers which is comparable to the smoothness of the board over which I pass my hand. Protuberances on the board would heighten the shock to my nerves but there are still two unlikenesses fitting into each other to provide material for still another. The shock to the nerves of feeling is borne away from the point of contact to the brain, where some physical process is set up, modified, suppressed, or encouraged. Yet even here we have not arrived at the idea "smoothness." The process so far has to be interpreted into meaning. There has to be mental activity added to these impulses before we find ourselves in possession of the concept smoothness. So complicated is the process, and so great the difference between the outside world, the initial impulse, the nerve shock, and the understanding or interpretation of the event, so great have been the contributions of the person himself to the result, that serious questions arise as to whether understanding is made chiefly by things or by the thinking mind.

Let us ask then why we cannot think that things, or at least sensations are formed directly into ideas. It would be far more comfort-

able to sit down in the easy chair of the realist and declare, "We perceive things as they are and that is all there is to it." Why might this not be the best, as it is the easiest, way to treat the problem, by refusing the imminent danger of thinking? There are at least two troublesome questions that will not down, and that face the effort to rest in any such realism.

The first of these is the problem of error. If objects create ideas, why do they not create the same ideas in all minds? Our interpretations of the same common experience are often as diverse as those of the famous blind men who interpreted the elephant as very like a rope, a wall, and a tree. If realities and ideas coincide, it is impossible to account for differences of opinion about natural phenomena. If one has been too bibulously entertained and seems to discover that everything has its double from the keyhole in the door, to the bed he tries to tackle as it flies around the room, how happens it that the single world of the ordinary day speaks falsely? Of course, one can with Bertrand Russell[1] declare that there are as many beds in the room as there are separate aspects under which we may view the one bed that is there. We are reminded of the ludicrous instance of the ponderously fat man of our acquaintance in the bank, of whom another said, "I went into the bank and it was full of Charlie Smith." There are minds to which such a type of explanation doubtless seems rational but there are others to which it is no more convincing than the persistent grin of the Cheshire Cat, which remained after the Cat had withdrawn. At times there appears to be danger that the disputes of philosophy may settle down into mere contradictions of temperament or degrees of wilful credulity. Resort to a pluralism of this kind can give only a temporary relief at the best. If reality is as it appears, and appearances are fluctuating, one sense contradicting another without an arbitrating person, knowledge becomes impossible, being only a phase of changing appearances. We could not pull such a world sufficiently together to make practical living rational. By such an easy-going realism we erect error into equal importance and credibility with fact. This may satisfy the closet philosopher, but even though he calls it common-sense philosophy, it lacks the sagacity demanded by actual life.

The second fact that such a realism encounters is the failure of objects in experience to create ideas in unattentive, unprepared, or inactive minds. Words frequently fill our ears without creating ideas, and even sights assail our eyes without bearing appropriate meanings. Hearing, we hear not, and seeing, we do not perceive.

[1] *Problems of Philosophy*, Henry Holt & Co., New York.

An active element of the mind seems necessary to perception, which is attention. Attention is given in varying degree, and perception seems to appear in similar degree. Apperception, as it is sometimes called, must likewise be added if we are to interpret our sensations. By apperception is meant those memories and achievements flowing out of our experiences of the past which pour light upon the present situation. A babe's eye receives the images of as many objects as the eye of an adult, but in the mind of the young infant there will be little content of perception. This is because perception calls for mental activity, and grows with the growing endowment of past interpretations, or perceptions. The eye of the botanist, the astronomer, the chemist, the microscopist, the doctor, the nurse, the mother, the father, looks into a world which is hidden to the mind of lesser experience. Moreover, the person can will deliberately to set aside, as not useful to present purposes, sensations that are being borne in to eye, ear, and touch. The person may refuse to consider certain sensations and turn his attention to his writing, his reading, or other occupation. This could not be if ideas were the simple product of sensations.

Thought then is an Activity

Since primary perceptions occur only in combination with mental activity, it must appear that thought is itself a mental act. If thought is a mental act directed by the personality in response to certain sensations chosen for attention out of a great multiplicity, we shall have to give over some of the cruder notions that have gained credence, such as the "storage" of thoughts or ideas in the brain. Here we have many varieties of "figure" thinking, idols of the mind, set up to save the pain of reflection. There has been much talk about furrows in the brain, as if recurring ideas were synonymous with physical ruts in the brain-substance, and brain convolutions were multiplied thoughts. We have had the pigeonhole theory, contemporary with the sway of the pigeonhole desk, where contiguous ideas set up in next-door apartments on ready call and in neighborly cooperation. Though these theories passed for a time as the latest scientific facts, their reign depended upon wholly unscientific figures of speech. Such minds as found it difficult to discover any scientific bearing in such statements have been duly anathematized as ignorant and behind the times. Even much of the latest jargon of materialistic psychology will, it is safe to say, prove as ephemeral as those that have preceded. Such is the end of all science which depends chiefly upon the fertility of the imagina-

tion. If thought is an activity, the brain must bear much the same relation to thinking that the muscles of the leg bear to walking. Walking no doubt has a direct effect upon the muscles. Much walking makes more walking possible. Yet who would affirm that the twenty miles done yesterday is "stored" in the cells of the legs? The previous activity of the legs has perhaps prepared for the easier accomplishment of twenty miles today, but if one waits a year before essaying the road again the "stored" energy is not there. The brain appears to be the muscular organ that grounds mental activity. The scope of mental activities is dependent on normal physical structure as the act of running is dependent on the presence of normally functioning muscles in the legs. The person directs mental activity in the creation of ideas much as the athlete directs the course of his running. That there is purposeless and random thinking is no more of a count against this conception than the purposeless and random drumming of a pencil, or the twirling of thumbs of a nervous person would count against the possibility of a purposeful direction of muscular activities. Thoughts do not tarry in the brain, for they exist only in the act of thinking, and an exact repetition of a thought is never possible. Into the "repeated" thought go the matters acquired or lost through the intervening experience. Whatever mental changes take place in the brain do so under the influence of mental exercises or neglect, and things once mastered are more easily mastered again. But mental capital acquired may not remain undeteriorated. It is frequently said that "no one can take our education away from us;" nevertheless it is as possible to lose it as it is for the runner to lose by neglect the capacity for running. We can preserve mental power only at the price of mental activity.

There is a great degree of mystery as to *how* the person can command and direct the activity of his brain. There can be no doubt that the creative thinker *does* so command it. It is not easy to discover the subtle intricacies that relate willing to thinking, or purpose to creative imagination. Yet this relationship is scarcely more mysterious than that of the will to the flexing of the muscles of arm or leg. No mechanical explanation however refined can make it appear plausible that an immaterial decision can set matter in motion, yet it is the commonest of facts and experiences. Normal-mindedness is as dependent on brain normality as the kind of walking one will do is dependent on the normality of one's legs. We cannot, because one short leg affects our gait, say that walking is caused by the leg. The directing power of the movement is not in

the muscles themselves. So a person with injured or deficient brain capacity is limited in his mental efforts in much the same way that his walking would be affected by the possession of withered members.

Under such conditions it is quite apparent that the development of mental power has a relation to the amount and quality of mental exercise to which the person gives himself. The influence of heredity may not be nearly so great as is often supposed. At this point in life there is great democracy. The person may suffer from mental neglect, from bad environment in childhood, social indifference, or institutional lack, and yet the determined individual may be able to rise superior to all these obstacles. Frequently the handicaps, by intensifying his determination, become a spur rather than a hindrance. As the brain is slow to develop to full capacity, it is the latest to deteriorate, and may keep its vigor, if it has been subjected to sustained and active exercise, long after other powers have passed their meridian. The truth of the active nature of the mind in all judgment, to which Kant called attention, is therefore of great importance. To the individual because it indicates his responsibility for the use of his own understanding; to theories of education in comprehending and directing the mental growth of the young. It is an imperative viewpoint for all correct theories of perception, and cannot be safely overlooked in the theory of thought. It is a fact of common experience that cannot be denied. Neither thinking nor knowledge is possible without an attentive and active understanding. Thought is an activity.

The Danger of Thinking

If the activity of the person in thinking is granted, it will readily appear what a train of consequences may flow out of this constructive enterprise. Thought as activity may be but the beginning of those changes which affect the general human situation. Thought externalizes itself in undeviating ways. It is the opening scene in the diversified drama of personal and social history. The possibilities that lie along the path of thought have always been apparent to the dictators and oppressors of their fellows. Shakespeare puts into the mouth of Caesar the famous words concerning Cassius: "He thinks too much: such men are dangerous." Little wonder that with the fall of Paris one of the earliest acts of the German dictator was to stop the teaching of philosophy, the liquidation of the philosophers, and the destruction of the books. The world of life is in constant change, is constant change, and the act of a dictator was as

futile against the tides of thought as was the effort of an earlier tyrant to command the tides of the sea to return to the deeps before their time. Old solutions may throw much-needed light upon present problems, but there are always new factors which prevent a complete solution without the addition of new viewpoints. Unfortunately there is no formula for automatic progress. The direction may be downward as well as upward, the attempt to travel by the guideposts of the past may be quite as dangerous as the most revolutionary of new ideas. The only prospect of healthy solutions is to encourage healthy thinking and to prepare to follow it. Only thus can insight keep pace with the stream of changing events and circumstances. Thought is the constructive power that creates, that invents, that molds affairs, that leads into new advances. To stifle or constrain it with conventions or decrees is to turn back to savagery. The fact that it may become destructive as well as constructive calls not for repression but for the competition of saner and better thinking. The chief contribution of education may lie then in training the young mind to think, to emphasize mental activity, and to encourage the youth to sustained and profound mental exercise. One may well deplore the present disregard for mental capacity which puts the great stress upon mechanical operation. In the thought-activity of today lie the fortunes and achievements of tomorrow. The new world order can grow only out of the thinking of today.

CHAPTER IV

Mirror or World

THE CHIEF OCCUPATION of the person from birth to death is the interpretation of experiences. Even his moments of sleep are disturbed by dreams, through which the unslumbering mind attempts to attach meaning of a rational kind to outer disturbance or inner pain, or the solution of problems which have been autosuggested to what is called the subliminal consciousness. There is no experience of the solid and external world that is ever separated from the activity of thought. All that we know of objectivity is what we are able to interpret through mental effort. Nothing that we are able to name is detached from us or unrelated to us. The person is therefore the constant co-creator of the world of reality, and both himself and his mind are a salient part of the universe of reality. The meanings which his mind sets up as the interpretations of sense experience, he attributes to what he calls the "brute" facts of an outer world. Since these interpretations cannot be changed at will, he credits the external source of his impressions with a continuity, a permanence, and solidity divorced from their sensuous effects upon him. He is as unconscious of the mental processes involved in constructing that reality as the normal boy is unaware of the courses of digestion. Accustomed to look outside for impressions, he overlooks the interpretive nature of his knowledge which takes place within. The world he knows is a world of meaning which he erects out of his sensuous experience and which is his world of reality. The senses are limited and can function only in certain very definite ways, so that the interpretation of one day's experience differs in no essential degree from those of another or those of one normal person from those of another. The permanence and changelessness which we attribute to an outer world of "brute" fact may be due to the functional limitations of our senses rather than to the changelessness of nature herself. The limited range of our human senses keeps our feet on the ground even though our heads are in the stars. The "common-to-all" of the environing world may be chiefly a "common-to-all" that resides in the five human senses.

The recent discoveries of science have made us startlingly aware

of the possible existence of worlds of reality that may be hidden from us through the inadequacy of our own senses, which are continually expanding through the invention of new instruments of apprehension. Endowment with a sixth sense might make such a change in our world of meanings as to constitute for us what would be physically a new world. It might also be that this new sense could come through the gift and development of what is now called spiritual insight, that would enable us to slough off as completely our old world of limited and limiting interpretations as does the worm that bursts from the cocoon as a butterfly, weaving out of its vermic limitations a new existence. Where then is our world of experience, all without or all within? Do we but mirror an external reality, are we the chief reality, or does reality exist in the fusion of external with internal known as the person? In the pursuit of such inquiries as these, it is clearly appropriate to ask about the nature and extent of our knowledge of the world around us and its relation to truth.

Practical versus Theoretical Knowledge

The fields of science and philosophy have suffered long and grievously from the lack of precise definitions, the affliction of words. It would be a happy gain if by some sort of semanticism we could define and then make our meanings "stay put" though in the very nature of the living human mind they cannot. Perhaps we should, through some sort of common consent such as the semanticists seek, use the term "knowledge" as applying to the demonstrated facts of science, while truth might be taken as representing the more comprehensive field, applicable to human values as well. Of course we shall be commanded to say whether we do not consider scientific knowledge as truth, and the opposing parties will ask if we intend to rule knowledge from the category of human values. So because we cannot agree on terms the old debate between the two goes on everlastingly. This failure is largely responsible for the acrimonious controversies between science and religion. There is, however, no basic reason for disagreement. If science can increase knowledge, that knowledge is a certain phase of eternal truth, and cannot in itself be hostile to any truth of religion. If religion possesses truth, it need not fear discoveries in any realm. The confusion at this point is well illustrated by an editorial which appeared recently in a college newspaper under the head of "Student Opinion."

Two university men are working on a machine to restore life to allegedly dead human beings. In itself this is interesting; it is symbolic of the scientific attempt to understand and supplant nature.

But what would happen if this machine should accomplish what its inventors desire? True, we would have a marvelous step in the advance of medical science, we would have a machine to stop sorrow and sad memories [sic].

More than this, however, we would have a revolution in the thought, customs, and ideals of mankind. What would happen to religion? What would happen to the concepts of transcendental idealists? These beliefs would be junked.

If the life-restoring machine works, all those beliefs which hinge on the existence of a soul, of an existence after death, must disappear. The scientists will have proved [sic] that man is a mere aggregate of mechanical parts, capable of being stopped and started like an automobile.

So far, science has not been able to create self-supporting life or restore the human mechanism to activity after death. If these facts are accomplished, Plato will take his place with the great dreamers of literature, the great fiction writers. No longer would there be any possibility of punishment after death, and this one invention would change the entire mode of thought and living throughout the civilized world.

In such terms does the sophomoric mind of the pre-war student disport itself, aided and abetted no doubt by the sophomoric minds of certain university professors of whose teachings these are the echoes. One may note the eagerness with which such thinkers greet the disappearance of all mandates for the life of values, such as justice, righteousness, and love, as if the prolongation of the earthly life would bring the end of sorrow and sad memories. The most important fact about this outlook, however, is its complete failure to comprehend the meaning of religion, of moral value, and of the deeper nature of man. To such a view religion is consonant only with the fear of Hell, and that removed, there is no place in life and no incentive for the pursuit of the higher values. That is, the higher values, which it is the task of religion and of religious belief to encourage, have no standing in the world of reality. The whole realm of meanings which make the world a decent place for living, and make possible what we call civilization, is dismissed as unreal.

The facts of science are in the last analysis to be judged by their conformity to controlled experimentation, but there are for human happiness and destiny even more important facts in the realm of character and the spiritual life. It is thus a mistake to assume a practicality in science as over against the impracticality of religion. In any such contest religion would be certain to win out because it touches the higher needs of man's nature and meets the wider demand of learned and ignorant alike. Functionally it outranks the demand for knowledge itself. The spiritual needs of man are more

clamorous in a civilized society than the physical because they involve the very values that give man his distinctive place in nature. They are necessary not from the religious standpoint alone, but equally from the standpoint of humanity. Indeed, man's scientific knowledge is touched with this very practical quality of human value, because he is perforce compelled to see the world of phenomena through the interpreting glasses of what he, the possessor of human values, is. Moreover, the main drive of scientific research, calling for the highest tension and frequently for self-sacrifice is implemented chiefly by a religious passion for human betterment. There can be no disparagement to either party, then, in referring to the facts of science as knowledge, and to the facts of value as truth.

Shortsightedness at this point has led to the frequent assumption that certainty is to be found only in the realm of physical knowledge; that what cannot be observed, weighed, tested, measured, set in mathematical terms is negligible and valueless. By such suppositions we divest ourselves of those facts that are of supreme importance to us. Knowledge and truth must walk together if there is to be any reasonable or adequate conception of the universe.

Dependence of Empirical Knowledge

We are thus brought face to face with the dependent nature of physical or empirical knowledge as it is commonly called. The dependence of the knowledge of nature upon interpretive conditions of the mind has now been intensively emphasized from within the realm of science itself through developments that have followed the acceptance of the theory of relativity. Knowledge of surest scientific demonstration is now seen as not something entirely apart from the interpreting intelligence. The dog, the deer, and the hunter, do not look, for practical purposes, on the same world of objective meanings. The dog would make a poor scientist though he lives in the same world of nature. What makes the man scientific is the possession of a larger world of values and meanings. The law of gravitation is applicable alike to dog, deer, and hunter, but it is only the hunter that can sufficiently reflect upon his experience to make scientific use of his knowledge. He is thus enabled to increase his power by expanding a gas which makes his bullet outrun the deer, and his knowledge of ballistics enables him to fire in such a way as to be successful. That great world which science has built in the field of demonstrative knowledge has been due to mental power and effort which is as "physically" undemonstrable as the results of religious faith which are demonstrated in the arts of living.

Yet there is a further question. What is the limitation and what is the nature of scientific demonstration? Primarily, scientific demonstration means to us that something has taken place in appearance. If we can connect that appearance with previous or succeeding appearances in uniform order or relation, we say we have discovered the "law" of the appearance and consider the matter scientifically explained. Thus when we speak of scientific demonstration, we mean we have discovered a succession of uniformities and coexistences in phenomena. By reproducing the conditions we can bring about the repetition of results and these take their place in our normal experience. Scientists feel surer of the demonstration if it falls within the purview of some of the five senses, but there are many modern efforts to extend the field into the region of thought or imagination, as in modern psychology.

Science cannot go behind the phenomena, which it knows only as sensation, to seek the source of the uniformities it finds without committing itself to metaphysics. If it would do this, it cannot avoid the whole problem of the meaning of reality, its relation to thought, and the nature of the world-ground. The moment it attempts this, it is no longer science but philosophy. It must then define its field and acknowledge its true place in human thought. In the final analysis, any phenomenon to get scientific standing must be common-to-all. We accept color, for instance, as an experience common to normal vision (in spite of the color-blind), and we do not, in science, go back of color to discuss whether it is an objective or a subjective experience. In electrical phenomena we discover a certain uniformity of activity, over which we have limited powers of control, but we can say nothing as to "what" it is except that it must be an agent adequate to certain results. All we can know of the agent must be through the results produced. If these results are chaotic, we would be justified in saying that the world-ground is accident; if they are uniformly meaningful conforming to the human intelligence, we are justified in assuming intelligence in the world-ground. The indubitable fact is the dependence of scientific knowledge upon human interpretation.

Knowledge—Pragmatic, Provisional, and Relative

Knowledge is then a practical possession, the worth of which is to be measured by its practicality, or by the insight it gives into the nature of the general order of reality. We are quite incapable of dealing with things apart from their use, their relations, and their meanings. Do we thus rid science of a rich content? Has knowledge,

kept to practical issues, an impoverished meaning? We think not. A certain advantage is gained through this limitation to practicalities. Opportunity is offered for science to rid itself of a weight of expectation and explanation for which it is inadequate. The scientific assumptions regarding space, time, and infinity are good examples. Men have frequently passed from the actual relations which these terms express to theories not only scientifically, but also philosophically unwarranted by the known facts. Such presuppositions, in turn, face about to defeat science at its own task. These are the scientific traditions which time and again stand in the way of scientific discovery. The opposition to the discoveries of Einstein (which some notables among his one-time opponents would now wish forgotten) provide a recent example. Obsession with dogmas such as the infinity of space, the infinite divisibility of matter (though the atom was presumed to be indivisible), the conservation of energy, matter, mass, and motion, the existence of ether, have led scientists to deny, not the theories, but the phenomena that contradicted the theories. So inertial is the human mind, so set upon a favorite concept, that it is easier to presume some mistake in the experiment than to face the appearance of hitherto unobserved phenomena. Thus into science has been frequently dragged the unscientific spirit. Truth has two eyes for the discernment of the world, the eye of science and the eye of philosophy. In the search for meanings, to get along with only one of them is to resemble the barnyard fowl with a single eye which in its endeavor to see, simply swings around a circle picking at corn it doesn't hit. What do we know? At best only the sequence of phenomenal appearances. If we seek the larger range of truth, we must enter also the world of values.

The World "Out There"

Have we by this process of thought seemed to make the "world out there" a mere realm of shadows and illusion? Such a conclusion would be most unfortunate. The world and human experiences are made no whit more certain or real by transferring all reality to an Unknowable substance forever inexperienceable, though like the reality of Herbert Spencer, producing sensations within us. This concept must be called the great illusion of our era. We are not forced to a choice between the reality of matter and the reality of selfhood. And why not? Because you, the person, are as much a part and parcel of nature as anything created. Even more a part of the reality of the natural world than the insensate mountain that stands

before you in all its permanence and sublimity. In the world of nature there is nothing more sublime or meaningful than man himself. Though the introduction of freedom makes possible both error and evil, the achievement of this new factor in world-meaning may be worth all the mystery and travail that it costs before it can come to ultimate realization. The really great world of nature and reality will not break upon our understanding until we have come to see that the world "out there," while important, gets its significant meaning and value within the person himself.

This fact gains special significance as we recall the limited scope of the physical senses both in sensibility and in time, and reflect upon the mental process involved in the simplest perception. To locate the chief reality in an unknowable substance "out there," a world of unchanging solidity, is to cut off scientific inquiry as it approaches what promise to be its most interesting and important discoveries. These have to do with the nature of the person, his powers, and his relation to the external world of experience. Science has only begun to unravel facts hidden from the senses of a previous generation, not to mention those of the more distant past, all of which indicate that it may be quite as important to know about the world "in here" as to perceive the world "out there." The time is now past when we can afford to ignore the inner half of reality. As an example, take the simple perception of a color. Already, taking leave of the externalities of perception, the scientist distinguishes between the various colors of the spectrum by a mathematics of wave length or vibration, which does not appear to us in perceiving. Unless there is something within the mind to correspond to these, as in the case of the color-blind, there is no perceivable color. For the so-called secondary qualities, what is within is quite as important for establishing the world of reality as that which is without. If we attempt to sift out the mental side of the perceptive process, or that furnished by the mind itself, we are soon left with pure negation and nothingness, an imagined substance which is the source of qualities but possessing none. We should be left with a real world bearing no information whatever, and if we were logical, which materialists can never be, we should admit complete skepticism of reality, and the world of perception as mere illusion.

As to the element of time, there may be facts, events, successions in the natural order, that move in so vast a cycle or orbit as to be beyond the range of human experience or recorded history, as the moth that flutters in my candle could not realize the succession of events of weekly repetition in my life. That there is a cosmos of such

events we are aware as we study the activities of the sidereal universe though we cannot tell what they are. We see in a glass darkly, but all we see we gather in the mirror of self or personality, and the mirror is as important as that which it reflects.

CHAPTER V

Prove It!

IF on making a statement to anyone he makes the demand "Prove it," one ought to inquire first perhaps just what he would consider proof to be in the case. When we go into the matter of proof we find great differences of opinion, with men easily believing that proved which they like to think is true. Some minds are easily satisfied with the least evidence that can be twisted into favorable construction toward their preferences of action, their selfish desires, their avarice, their lusts, their idiosyncrasies, adopted dogmas, class or racial prejudices. No word ever spoken was more generally true than that of Caesar who declared: "Freely do men believe that which they wish." What is called proof stops with the mental satisfaction of the individual, and it is all but impossible to convince any man of anything against his will and predilections. Most arguments are carried on *ad hominem*, each man eminently satisfied with his own way of looking at things, and wondering why the other man can be so stupid as not to see the truth. Even those who disagree most violently with generally accepted opinion and pride themselves on their tolerance, are often tolerant only toward a radical or skeptic mood, interpreting tolerance to mean a willingness to accept their own opinions. Often these are the least open to new ideas, and so the lethargy and inertia of the human mind, the danger and pain of thinking which upsets old and favorite opinions, these hold the world in thrall. However, there is a compensation in this because of the delay of the radicals who must wait until the rank and file can catch up with them.

Proof as Mental Satisfaction

Is proof largely a matter of mental satisfaction? We feel so certain with respect to the commonly accepted theories that we do not think to question or analyze them so long as they do not fail us. Upon examination we might find that the certainty of "proof" lies essentially in the regular recurrence of the expected and experienced phenomena. Reflection makes us aware also of a large region outside the field of science, where, in the absence of any possibility of scientific demonstration we depend upon recurrences to justify

our practical beliefs. We believe our theories sustained as long as the uniformities recur. The natives of the Caribbean isles, observed by Columbus, found the beating of tomtoms a "proved" expedient for driving away the dragon that threatened to swallow the moon at the time of lunar eclipse. The method was never known to have failed and they were certain of its scientific validity. Besides, it gathered to itself all the dignity of untold generations of experience, the force of traditional knowledge. Primitive peoples are not the only ones that have mistaken contemporaneity and succession for causation. This factor is the stronghold in popular regard of all sorts of nostrums, medical, social, and political.

When we consider critically the nature of scientific proof, we find it to be a real pragmatism—"the proof of the pudding is in the eating"—the proof of anything is in the experience of it and in its recurrence under certain recognized conditions of succession. When we can control these conditions, we have scientific proof, but much of our knowledge of a practical nature is beyond the power of controlled experimentation. The factor most constantly overlooked is the dependence of events, so far as they have meaning, upon the interpretations set by the experiencing mind. What is thus called scientific proof is confined to uniformity of recurrence, and uniformity of interpretation by normal minds. An occurrence that was not known to have happened more than once would be discredited promptly as hallucination on the part of the observer. That the present "laws" will continue to hold for tomorrow is somewhat a matter of faith, akin to the assurance of the Caribbean natives that their tomtoms have driven away the eclipse. Now and then the assurances are misleading, as when the great Le Conte wrote a book in which he scientifically proved the impossibility of flight in a heavier-than-air machine. The inductive method of science provides only a one-way route to knowledge. By it we build up out of individual occurrences the generalizations which we call laws. We then reason backward from general to particular, and consider ourselves in possession of infallible certainties. For this reason, much that is taken as proof is little better than axiomatic dogmatism. Frequently these assumptions retard the progress of real knowledge. The purely dialectical nature of many hypotheses has been noted by the late Professor F. C. S. Schiller:

> It would never be admitted that an event had happened without a "cause" so long as it was possible to imagine that an undiscovered cause had been at work, and it is preferable to suppose an error in an experiment or a defect in an instrument rather than to question the indestructibility of matter or the

conservation of energy. Such is our endless ingenuity in devising excuses for them, that it is practically impossible to disprove principles that have once been raised to axiomatic rank in any mind.[1]

The Relation of Proof to Uniformity

The dependence of proof upon uniformity discloses the reason for the scientific distrust of the principle of freedom or contingency in nature. Whatever is not uniform in appearance and succession is by so much scientifically unaccountable, and is relegated by the materialist to the limbo of unreality, magic, and false ideas. Science is scarcely to be blamed for this standpoint which is made necessary by the initial restrictions of its field of inquiry. The only blame lies in assuming that the field of physical investigation includes all reality. The incompatibility is a natural one. Whatever falls under the reign of uniformity is classifiable, its place in the succession of phenomena can be determined. It thus becomes a part of scientific knowledge. Anything outside of this cannot be called scientific. When we come to the domain of contingency, and have events that are dependent upon free choices, we have phenomena with which science is by its charter and constitution unfitted to deal. In pursuance of the inductive method, it can only place causation in preceding events. These lead to the consideration of sensory stimuli, nerve-responses, and emotional impulses, over which there is not exact control. Unwilling to admit ignorance or to acknowledge the natural limitations of scientific knowledge, it is easy to place causality in the field of the physical. As a matter of fact the most advanced physicists of the present day have given over the whole matter of causation as being beyond them, or to be maintained as referable only to a Supreme Creative Intelligence.[2] In such manner does science now turn from the former conclusions that all human actions are externally determined and that there is no reality in the assumption of human freedom to the conclusion that causation behind atomic action is undemonstrable, since that is the meaning of "the principle of uncertainty." We have come to see that we cannot deny the important facts of value, which are the bases of law, government, social institutions, and decent living. Such repentance would not have been necessary if there had been sufficiently critical

[1] *Formal Logic*, Macmillan Co., N. Y., pp. 244-5.

[2] Planck: *Philosophy of Physics*, Norton, N. Y., pp. 30, 43f., 78-80.
Millikan: *Time, Matter, and Values*, University of North Carolina Press, pp. 30, 90.
Heisenberg: *Die Grundlagen der Quantenmechanik* (quoted in Zimmer: *The Revolution in Physics*, p. 214).
Zimmer: *The Revolution in Physics*. Harcourt, Brace, N. Y., p. 213, and many others.

analysis of the nature of scientific proof, as based upon the discovered uniformities of nature and generalized into a probability of recurrence. The value of such proof is heightened by productive experiences, and lessened by negative or nonproductive ones, yet the reassurances give great mental security. In this order of probability, the possibility of contingency or freedom cannot be ruled out. Finding so large a proportion of nature acting uniformly does not prove contingency impossible, for uniformity may spring directly from uniform choices of a directing will. If these choices show integration and evolution, they demand reference to a Supreme Creative Person as a reasonable assumption, for there can be no other. So regular might be the habits of a freely choosing person, that, as in the case of Immanuel Kant, the neighbors were said to have set their clocks by his daily appearance on the street. Anyone would be especially bold to attempt to maintain that Kant's daily exercise might not have been interrupted by a contrary choice. Uniformity in freedom may be the result of a high state of rationality in a freely choosing and consistent person. However, any series of succession in phenomena which becomes dependable, furnishes that which we need for the governance of life, without the necessity of metaphysical explanation. So long as the uniformities can be depended on, we can use them, whatever their source, and the most substantial of proofs can go no further.

Inapplicability of Scientific Method to Freedom

The inapplicability of scientific method to freedom makes a place for, and gives standing ground to, philosophy. In the realm of freedom we face those human values without which man would not prize even life itself. Humanity can never consent for long to abide by an inquiry which begins, continues, and ends with the physical world, and which denies or ignores the more important world of values. We are not satisfied to have the world "by which men live" remain unconsidered and incoherent. Here too we demand rational foundations, self-supporting, and bearing uniform relations to the world of objectivity. While proof may not be of the identical order obtained in the field of science, proof here is likewise of a practical nature, and is determined by the presence of values. There is possible a rational and practical order of ethical action, a true evaluation of emotion, such as love, honor, patriotism, religious devotion, the "experience of God," in accordance with their ethical fruits. In the ethical experience of man this type of "proof" is no whit inferior to any other. It only moves in a different range of reality, a superior

range, if you will, because closer to the higher needs and progress as well as to the true nature of man. It is true that to the matter-bound man such claims are a solemn, but nonetheless hollow, mockery, much as the deaf might deny reality to the symphony, or the color-blind deride an attempted description of a glowing sunset. The deeper values are incommunicable to people of no faith, but to those who receive and act by them they are the power of life, an immediate, realistic experience, which comprises the best as well as the most incontrovertible possession of life. Even thought cannot be scientifically demonstrated.

Scientific proof applies where there can be controlled experimentation, but even here we cannot be sure we have grasped all the elements involved. The greater our advances in physics, the more impossible this seems. When we come to the most important affairs of man—his social, mental, and spiritual functioning—they are always difficult and sometimes impossible of scientific demonstration. To demand scientific proof of a wife's love, for instance, by reference to the lie detector, would very properly kill that love which can live alone on mutual faith. To demand scientific proof of the value of a painting or a symphony, or of architecture, is to be blind to the indescribable value which must be there if the work is to be great. The tying or the attempt to tie genius down to demonstrations to be named in dollars and cents is to kill it at the roots. This is one of the chief sins of educational theory. In its demand for "practicality" it too often overlooks the nature of true education. The human spirit rises to the heights of genius only under the spur of freedom and adventure. Even scientific progress and discovery thrive best in the hands of those who forget themselves in a fine religious devotion to truth and the commonweal. Similar results attend the demand for the "proof" of the existence of God, or some measuring of the results of the good life in "practical benefits" such as financial prosperity, or escape from Hell. Such a demand, whenever or by whomsoever made, means the desecration of religion.

Proof a Satisfaction of Mental Inquiry

Proof satisfies mental inquiry by placing the given event in its orderly relations. Its shortcomings arise from its very nature. Having proved something to our own satisfaction, we often find our opponent unconvinced. There is nothing that can silence an obstinate unbelief. After all arguments and proofs have been brought it is still possible for the other fellow to say, "I do not see it." The

best answer is perhaps, "Don't you wish you could?" This was the end of the argument for Confucius who refused to waste further time on a pupil, who having been shown a quarter of the truth could not discover the remainder. We can never be sure of discovering or controlling all the causal precedents, and the doubter will always find a loophole that satisfies him. The wise man makes the best practical use of the information at hand though it be tentative, partial, and incomplete, if it but offers sufficient surety on which to act for the present. The attempt to view knowledge as less than provisional, and to claim a sort of omniscience closes the avenues of scientific progress. In this world many things must go unsettled, many solutions must await on further light, and 'tis better so, for therein lies the promise of man's future development. Proof has to be of a practical nature as judged by a normal mind. All other types are laughed out of court, and sometimes the most cogent proofs along with the rest. The proofs of the Ptolemaic astronomy were and are scientific and valid, viewed from the ancient "frame of reference," as were also those of Isaac Newton, until it was found desirable to change the frame of reference to a prospect of things on a larger scale, that of relativity. Scientific proof can no more be final and infallible than that of religion or philosophy, or even of man himself. It is impossible for man to see anything except through a personal frame of reference, his own experience. Perhaps the making of a new world may come with a shifting of the frame of reference from material things, to a higher center of spiritual reality. Man's real evolution awaits in the offing.

CHAPTER VI

"*Sic et Non*": So and Not So

ABELARD, father of mass education in the university, startled the smug theological world with a manuscript that was afterward ordered burned, the title of which was *Sic et Non*. The particular genius of Abelard, marked with an irreverence for authority pleasing to the younger generation even as it would please the youth of today, arrayed the authorities against each other in parallel columns. The trick struck Abelard as a new and clever idea. It depended upon a survey of the growth of opinion in the face of society which refused to believe there was "any such animal" as progress. Modern semanticists notwithstanding, neither knowledge nor opinion can long be confined to set phrase or static thought. Meanings have devious ways of escaping the prison house of language. Even if ideas did not change there is no power that can fasten meanings irrevocably to specified words, because no two persons are capable of achieving exactly the same understanding of any word or event. So it becomes possible for the new generation to revere the words of the fathers, to repeat old creeds sincerely by simply, and innocently, putting into them its own content. What other content is possible than one's own understanding?

Interpretations are of necessity as varied as the people who make them. They are as varied as the intellectual, social, and religious backgrounds, the experiences of life, the accidents, strivings, successes, failures, joys, sorrows, frustrations, and fulfilments of the persons who do the interpreting. No attempt to make people *think* alike has ever been quite successful nor ever can be. Do their best, no two individuals can see *exactly* alike, or press the same meanings out of experience or indeed from identical phrases. The nature of man's world springs from within as well as from without. In the march of time we get a progressive, a regressive, or at least a changing world of meaning, one generation cannot understand another. This fact about the development of ideas enabled Abelard to quote one saint in opposition to another to the horror and distress of those who wished to believe that theological opinion had been maintained without change, to whom agreement with the saints was important. There is no way of preventing this mutation

of interpretation even in identical statements. This is not only the case in the fields of theology and philosophy but in science as well.

Claudius Ptolemaeus was, to his day and generation, as great and as true a scientist in the formation of the Ptolemaic system of astronomy as was Copernicus to his, Newton to his, or Einstein to his. The positions successively held and surrendered were and are still as true as ever. The change has come about not in the face of nature but in the mind of man himself. The real change has been a change in the so-called "frame of reference." From the standpoint of a motionless earth, which is the concept used by most of us, the sun still "rises" and "sets" in east and west respectively, and we regulate our clocks by the Ptolemaic theory. Uncle Ephraim on Cape Cod was as right as the best of us when he declared that the sun rose on the east side of his house in the morning and moved around to the west for its setting. His mistake was in assuming that *his* frame of reference was the only rational one. Too sure of his empirically scientific knowledge, he drew before the heckling boys of the village store the conclusion that the earth was the center about which the sun revolves. There can be no doubt that successive generations of men will discover new frames of reference from which to view reality, and new frames of reference within man's own understanding will reveal new worlds and new relations of fact. It is but yesterday that the cyclotron microscope was invented to give us a new frame of reference destined to revolutionize many prevalent ideas. It would be quite possible for some scientific modern Abelard to set the scientists in array against each other by a contemporary *Sic et Non*. Arranged in parallel columns, it could be shown that every scientific affirmation has at some time been scientifically denied. It is somewhat disconcerting to men of set ideas, but it is undoubtedly true that interpretations of fact are both "so and not so" according to the standpoint from which we view them.

Attention has been called to this state of affairs in order to point out the man-centered, or anthropomorphic nature of all our knowledge. One anthropomorphism, of which we supposed science would be forever clear, she has now come to adopt in these latter days as her own beloved child, though with a certain reluctance, *i.e.*: the familiar doctrine of relativity. Relativity in scientific investigation means that the individual chooses from what point he will look at his world, and that what he sees will depend upon the place from which he looks. Thus the world becomes for the moment *his* world.

The Person as the Source of Knowledge

The author is quite aware how bizarre and foolish the above caption will appear to those who have thought of reality as altogether an external thing, but there may be truth in it not appearing on the surface. The pioneering of modern science in the concept of relativity, and the attendant discoveries, has brought a revolution in human thought that cannot stop short of a place in all our notions of reality. The startling revelation that it makes is that the world of meaning depends on how we view it. If my frame of reference, like that of Uncle Ephraim, is simply myself, the plane on which my two feet stand, then my world of reality is small indeed. Reality is bound to be for me something limited and limiting. On the other hand, my world will grow successively larger, and will include nobler realities as I change my frame of reference from the small to the great. If instead of the floor of my narrow room I take the plane of the earth in its orbit about the sun, I get a larger world, if I take the disk of the galactic system I move into a roomier universe. I relate to myself then a universe of meaning as large as my chosen frame of reference makes it.

The doctrine of relativity becomes of mighty significance in a time when political frames of reference which have been set up on the basis of narrow nationalisms suddenly find themselves living in a neighborhood globe. Political expediencies, education, social organizations, scientific and medical discoveries, inventions, philosophies, and religions, are suddenly put to the test of world-wide frames of reference. Those that fail to pass the test will in the nature of things be eliminated, or suffer sea-change into something so new and so strange as to be no longer recognizable for their former selves. This condition of affairs will be charged to one party of opinion or another but is in fact the result of a world-wide and irrepressible revolution taking place within man himself by the compulsion of new frames of reference through which he is forced to judge reality.

To revert to the questioned caption above concerning the person as the source of knowledge, though the statement may seem extreme, it becomes less so if we pause to recall the fact that we become aware of things only within the circuit of our own minds. The world of meaning itself, and every fact or object in it which we can identify, must first be set up in us, must first become in a sense a part of us, and we of it, before it can be recognized as possessing the quality of reality. There is for the person no world which does not exist primarily within the confines of his own

mind. The tragic and awe-inspiring suggestion of the moment is this: not that we shall be able to reverse the law of gravitation at will, though we have in thousands of instances learned to overcome and master it, the kind of world we will have tomorrow will depend upon the kind of world we think today.

Relativity the Product of Growing Understanding

Whenever the universality of the principle of change has gained headway in philosophic thought, it has brought in its wake the postulate of relativity. With the early Greeks, relativity was applied to the criteria of truth, and affected particularly the field of moral concepts. Such values as right, truth, justice, and virtue were held to have, not an absolute but a relative meaning dependent upon time, occasion, the desire or happiness of the individual. The predominant application of the doctrine of relativity to the field of values was probably due to the fact that as yet the problems of perception had not been recognized. As Heraclitus unsettled the static thinking of his time by the assertion of universal change which led to the relativism of the Sophists, so the revival of the doctrine of change in modern thought has had a somewhat similar result. There is this difference, however, between the old and the new relativism. The perceptual and physical fields of interest have so outgrown that of value and conduct, that relativity is now applied predominantly to the fields of physics and metaphysics. As science and radical empiricism have revived for us the concept of change in every realm of experience, so again we find the notion of relativity taking a part in our view of reality.

Relativity of knowledge grows out of a certain relativity which we experience in life, but it never rises in naive thought. To common sense all natural phenomena are absolute, standing independent of meaning or understanding and in their own right. Common sense likewise endows our interpretations of nature with the same absoluteness as if they had no relation to our point of view. But all our knowledge of things is bound up with our own mental nature, limited by our few senses, and dependent upon our interpretations of sensations which appear quite unlike the things we interpret as objects. Into our commonest perceptions, to modify and change them, flows the memory of previous experiences, from which we are never free. Never except in the first experience, which from childhood we cannot recall, has there been an uninfluenced judgment of the meaning of reality. These prejudices hanging over from former experiences we call the apperceptions and they fre-

quently bar the way to knowledge which it is their purpose to further. Sometimes the tyro in investigation makes discoveries that are hidden from the better trained whose very erudition has led him to expect only certain results Many experiences of this kind have taught the scientific mind to be wary of easy conclusions. In a world of change, and in a world where we are dependent upon the interpretive acts of fallible minds, we soon learn that knowledge is an interpretation of things in relation, whose meaning lies largely in their relation. No one of them can be taken as an unrelated fact, nor can they be taken as facts unrelated to minds. After all, the world of knowledge we achieve is egocentric in spite of any wishes to have it otherwise.

Facts Are Always Relational

The relational element in knowledge is not confined to the viewpoint of the mind in relation to the cosmic order. It is present in the commonest perception of objects. No phenomenon can be taken apart from its general relations. Individual phenomena may be isolated for purposes of observation and study, but we can never afford to overlook the important item of relationship. Things are what they are by reason of the things to which they are related, including ourselves, and to miss this truth is to miss the larger fact. A blind trust in the possibility of coming at an unrelated knowledge has led to many pitfalls and to the neglect of philosophical outlooks. Any attempt to get at the meaning of nature is an endeavor to interpret certain cosmic effects upon us. We know sources only through activities which make impact upon the senses, for which scientifically we have means of weighing and measuring. We can describe the activities of nature and their effects upon us. What nature is apart from these activities is a problem for reflection and philosophy. Science, then, is nothing more than a description of the activities of nature, which presumes that these activities will continue in a uniform manner. When a phenomenal series has occurred in a certain order a thousand times, we feel safe in banking on the uniformity for the thousand and first time. But this is really description and hypothesis. Our knowledge of the nature of reality rests on the nature of the activities we observe.

A Wider World Swims into Ken

It may seem to many that so thoroughgoing an application of relativity removes assurance from the world of knowledge, that it is incompatible with the existence of any standard of truth. The

solid world of objects seems reduced to a fluidity that is embarrassing to any thought of permanence and certainty. While the facts may seem disconcerting, yet relativity has about it an unanswerable appropriateness. It looks toward wider vistas of reality. Our reduction of the universe to a static concept has no correspondence with fact, it is done only that we may for the moment fasten attention upon single phases of existence. It will not do to narrow our viewpoint to the extent of forgetting the larger whole of which the specific phenomenon is a part. We can stop the cinema in order the better to observe a "still" but we shall not understand the one "still" if we do not recall its relation to the whole pictured drama. The single fact cannot be understood out of its relations. The doctrine of relativity restores to us these larger relations, but it is not incongruous with abiding certainty of either scientific or moral principles. Truth, in any concrete application, cannot be taken apart from its relations and consequences, a fact that the absolutist or perfectionist often overlooks. Failure at this point has led to many perversions of truth. Men have not, as I think Mill stated, "made reasonable extension to adjacent cases." Scientific discoveries have been announced as laws, which were later found to be not universally applicable. Political and social utopias have entranced imaginative minds, but have fallen under the merciless requirements of the relationships of practical living. Theologies based on a single phase, or a narrowed consideration, of truth have failed man's relational needs. Since progress in the human mind must bring us into wider and wider contacts with actuality, discovering to us new and unsuspected relations, our truth is not an absolute thing given once for all, but a growing and changing apprehension.

The Case for Absolutism

The usual objection to the doctrine of relativity rests upon the demand for absoluteness of knowledge, though such absoluteness is something that limited human beings can never possess or experience. Absoluteness as a goal is one thing, though the "perfect" knowledge of today becomes the imperfect of tomorrow. It does not yet appear what we shall know, just because of our present human limitations. Absolute knowledge of a growing, changing world is not possible. The concept of relativity is thrust upon us by the necessity of thought if we look upon our world as a universe of change. Relativity is the mark of distinction which sets the world of life off from the realm of death. Truth does not change,

but our grasp of it is always partial and relative. Absolute truth is set forth as a concept in order to admit all the factors of knowledge. Absolute truth could have practical existence only in an absolute or finished world. It does not belong to man in his incompleteness, either of knowledge or of life.

Thus relativity appears as a necessary postulate for a world of change and of life. The static concepts under which we attempt to seize and explain reality are inadequate for a world of ever-expanding relations, and they are the persistent foes of progress. They keep us explaining by the use of worn-out formulas while we stubbornly shut our eyes to discrepancies we will not see. We assume the old formula must remain because it explains so much, and has been held so long. It has the backing of authority. A dogma like "the conservation of energy" must be saved and believed at all costs, or it might be "the materiality of the atom" or "the existence of ether." This dead weight of static concepts is the delaying load which keeps us back from wider vistas of truth in every field. This mental and spiritual inertia lights the flames of the martyrs in the advances of political, social, scientific, and religious understanding. It is the ally of those who wish to be at mental ease, or who wish to preserve a reputation for knowledge without further effort, of those who dread innovation, of those who look on life as a settlement and not as pilgrimage, of those whose minds are at home only to accepted truth, duly guaranteed by authority. However much such may have power over the world of today they cannot rule the future.

"Pure" Relativity Unsupportable

The statement that "pure" relativity is unsupportable may hit the reader as an abrogation of what has gone before in this discussion, but not so. The concept of relativity, entrancing as it is, cannot stand as a single and unsupported assumption. With a universe of complicated and constantly changing relations there comes the demand for complete coordination. Coordination in such a system is both inexplicable and unthinkable except upon the assumption of a directive Cosmic Intelligence as first, final, and efficient Cause. The growth of this demand through the prevalence of the doctrine of relativity is responsible for such changes of front among the leading physicists as that of Max Planck, in asserting the necessity of assuming a Supreme Intelligence behind the world order if we are to find any ultimate explanations. As change is inconceivable on the part of any subject which is altogether changing, so, if in the

universe change is to have any meaning, it must proceed from a source which survives change. Such permanence is to be found only in the person who weaves the changing panorama into a synthesis of meaning, and when the changes take on the character of cosmic evolution, they can possess meaning only in the presence of a Supreme Continuing Person. If one discovers a machine carefully picking paper off a pile, a sheet at a time, passing it between rollers, printing, folding, and preparing it for mailing, only a moron would ascribe such cooperative, delicate, and purposive, relations to accident. The existence of intelligible relations in the complicated operation demands the assumption of an intelligible source. Our concept of life, change, and relativity, is metaphysically consistent only with the postulate that behind all is the Creative Person. Among the inspiring implications of the doctrine of relativity are these, that it removes the emphasis from a static and therefore paralyzed world, to one of growing truth and expanding intellectual horizons. It sets its face toward new understandings and discoveries. It emphasizes a growing world and incites men to a growing knowledge. It transfers the thinking and the work of man from death to life, relates the soul to God.

CHAPTER VII

The Shadow on the Dial

THE NATURE OF TIME is no longer a question to be discussed exclusively by philosophers in their ivory towers. The relative character of time has become a matter of common knowledge as we study transportation timetables and figure the times of our arrival by plane at far ports. It is possible to arrive at any point now, on the day before we start, if the weather is good and flying conditions propitious. For the first time in human history the relativity of time has broken upon the consciousness of the common man. The pioneer toiling laboriously across the plains and mountains with his ox-team, to open up new empires took the better part of a year to travel distances that are now made between sunrise and sunset. Trans-Pacific voyages that once consumed three years are now made in three days. We now need no seer to inform us that the realities of space and time have been vastly changed for modern human beings. The tempo of present-day events has been so speeded up that, judged by the number of acts in which a single individual can participate, he lives many times the life span of his great-grandfather. The curious thing about this experience is that the multiplicity of affairs and events has made time seem much shorter, at the very moment in which it has been greatly lengthened. This fact has introduced new attitudes toward the time experience. Abraham Lincoln pronounced himself an old man at fifty-one, as he made his final address to his fellow citizens at Springfield. The days of his achievement of the presidency must have seemed long and heavy. Now people at fifty-one think themselves as being, and they are, in their prime. Grandma has her face lifted and appears as a girl long after that milestone is passed. Some moments of absorbed attention and enjoyment fleet past as if no time had intervened, at other instances, like those in which we stand outside the door of an operating room to catch some word of tragic hope, we watch the shadow on the dial, as if for an eternity. There is surely some sense in which time is the shadow of man's own thought, the framework of his own experience, the measure of his limitations, and yet it is not illusion, he does not create it, he must bow to it as inexorable fact.

Time as a Stream

The old hymn which our fathers sang—"Time like an ever-rolling stream, bears all its sons away"—has probably done much to fasten the "stream" concept of time upon popular thought. The one unquestionable figure of speech under which we represent time is that of a flowing stream of events, a pageant flowing past us. It seems to be characteristic of the world outside us rather than of ourselves. We seldom reflect that there can be an experience of flowing events only if there is something which does not flow with them. In a flow in which all things kept the same relative position there could be no consciousness of flow at all. If the drops of water in the river kept always the same relative position to each other and had a consciousness of each other, they might pass from the mountains to the sea without any sense of movement. If they could be aware of the bottom of the river or its banks, they would interpret it as the movement of the earth past them. And so it is with us, whatever the historic time our minds attempt to grasp we always relate it to ourselves in the present as the abiding center of the time relationship. Napoleon, Caesar, Homer, Hammurabi participate in events that stretch out behind the present, our present, and are visualized to us usually under the form of a diagram that represents succeeding centuries. If we think of the reign of Nero, we relate it to our own time in a sort of historic frame more or less filled with intervening events according to our knowledge. All time is seen as bearing upon the present instant of experience which is itself passing away. If we attempt to seize it or to define it, it is gone as surely as the moment which Faust was to command to stay because it was so fair. If, however, we were entirely absorbed in this moment or event, we could have no experience of time. It is because we discriminate a before and after in events relating our experiences in a form of succession to distinguish them from each other that we get the impression of time. We do not mean by this to assert that time is an illusion. It is part and parcel of the world order and does not depend upon us for its validity. It is a portion of the general relations which we call the universe, but it calls for a conception of the universe as an activity, an order of events rather than a fixed solidity.

The Static and the Changing

We may find ourselves troubled by the realization that there is that in us which is both a part of the process of change and yet

above change. If something is standing still, what is it? We watch ourselves dissolving under the pitiless attack of time. Our experience, our mental being and our bodies, our content of knowledge, our attitude toward the world, the way things look to us, things most intimately connected with our thought of selfhood, seem as fleeting as the world of events. States of consciousness, psychical moods rise and pass. In the course of life the old man seems to have brought down to his present very little from his early childhood. This seems so when he thinks of the completeness of the change that has taken place in him, but from another standpoint he has left not an item of the past behind him. All that was ever his is in some sense, yet with him, written indefinably into what he now is. Yet he appears to be the critical spectator, reflecting on his early moods, wondering how things could have looked to him as they once did, and all events falling into definite and related organization to each other and to himself. Where is that which endures? The experience of changing and at the same time transcending change gives him the notion of time. Like the other characteristics that separate us from the animals, man's sense of time is made, or at least erected into intensity by his power of reflection on his mental states. Some may object that animals also have a time sense, but to how great a degree is a question. The dog that buries a bone against the morrow very likely has some consciousness of relation, rather than a consciousness of the temporal form. Is it tomorrow's hunger that speaks or is it today's satiety? Most of the animal "instincts" would be exceedingly difficult to establish as arising from reflection, and there are much more complicated ones than the dog can give us. Take for instance, the trapdoor spider. Fabre shows us how she does by unreflecting instinct what at first seems the result of a high type of reasoning. The hinging of the door, the adaptation to its function of preserving the eggs and providing for the future of her progeny, can easily be interpreted by the human imagination as a highly complex act of intelligence. There is, however, a single fact which, if it be admitted, upsets the whole conclusion. If the work be destroyed at a point midway in the process, she completes the work as though nothing had happened. She builds on from the point already achieved as if quite unconscious that it means the complete destruction of the eggs about to be deposited. A problem is posed her which demands reflective intelligence and is beyond the power of instinct alone. In the higher animals it is improbable that we have temporal consciousness except in a very rudimentary form. The time experience lies essen-

tially in the power of reflection and self-reference both as to change and the survival of change.

Time as Succession

In defining time as the form of thought under which we relate events to each other and to ourselves, Kant seized upon its main characteristic which is confirmed outside the realm of philosophy in the recent doctrine of relativity. Time is the relation of succession in events. The time-transcending mind seeks out the relations which exist between successive moments and thinks of them under the form of time. In the development of the acorn into the oak, the process of growth takes place in such a way as to destroy identity except for a time-transcending intelligence. The twig which has put out a leaf or two is already something quite other than the starchy embryo from which it sprang. In the course of a hundred years there is nothing but relative position and meaning by which it could be identified. The identity is essentially one of meaning for a mind that is able to grasp the many relations that exist between the original acorn and the lordly oak. The process is seen as a whole, because we are able to grasp the relations under the form of time. Time can never be thought of apart from relations between events.

Time as Shadow of Incompleteness

The shadow on the dial becomes a significant symbol of our incompleteness, as it tells the tale of the sunny hours alone. Though it speaks eloquently of the time beyond the record it is also a reminder of our human limitations. Whether the temporal form would be necessary except to minds greatly circumscribed and limited is doubtful. Time might be, as some of the philosophers describe evil, only the shadow of human incompleteness. It is essential to any experience of causation, and for that reason the necessary concomitant of morality. Our minds are so constituted as to be incapable of seeing universally. We make progress, mental and moral, by a power of discreteness. We concentrate on a single event, and so doing discover it as one in a system of relations. With our sense of self-continuity we are able to apply the same discreteness to our mental states. Thus we are able to see the relation between our will and our deed; to study the result of our thinking and desires, to discover moral value in their expression or inhibition. That we cannot see all the results of our decisions is due to our limitations, but if we could see them all we probably should

not be able to act at all, or to act in freedom. The limitation is the indubitable ground on which it is possible to erect moral character with its measure of freedom. That time might take on other characteristics under other conditions might be faultily illustrated by visualizing a passing pageant between high buildings on a crowded street. To a child sitting on the curb or forced to look at the parade from between the closely packed bystanders, unable to see any but the section directly in front, the passing vehicles would occur to him in a strict succession. Taken up into a tower or from an airplane, his succession would become a simultaneity as he saw it from end to end. By change of his frame of reference he has changed his experience of time. The relations are now seen as simultaneous and the whole is viewed as a complete process unrolling itself. Succession and simultaneity are thus shown as merely variations in the form of relations. Many affirmations are being based upon the discovery of the relative character of the temporal order. Writers inform us that four-dimensionality of space, or even multi-dimensionality is thereby erected into fact. Time is conceived in its relation to space as "a fourth dimension." Viewed as possible standpoints of relation, such a conceptual time must be considered thinkable, but in much the same way as the infinite divisibility of a line, which can be thought but not practiced. There is no particular reason why our conception should stop with four dimensions. We could have as many as we could conceive different sets of relations or as we could intelligently express by mathematical symbol. The only limit would be the limit of the human mind in handling the concepts of relation. The variety of possibilities is limitless. To most of us, meanings become very vague the moment they exceed the concept common to all of us, that of three dimensions. There is suspicion that the idea of time as a fourth dimension is assumed in order to assist the imagination to seize what would otherwise escape it. At any rate we do erect time into a fourth dimension when we symbolize it in the clock or the calendar.

Time as Variability

The relative nature of time is still more strongly emphasized when we consider the variability of the time-sense in human experience. What time would mean to us is problematic except for the setting up of certain standards or marks more or less remote from our intellectual interests. What would we make of the passage of time were it not for the arbitrary divisions made by the succession of day and night, seasons and years? The child is con-

scious of succession, but the calendar is of late and difficult mastery, a thing chiefly of birthdays and Christmases. With the Eskimos there are but a day and a night in a year, and almost no consciousness of time as we conceive it. Note too that hours of emptiness, loneliness, of pain or unhappiness, leave in the mind the impression of all but interminable periods, while happier hours, though crowded with events bear a sense of brevity contradicted by the clock. Some thrilling five minutes of experience may bear to the experiencing mind, the weight, the power, the importance, and the effect ordinarily achieved in a lifetime. If one is incredulous of this, let him but read Antoine de Saint-Exupéry's *Flight to Arras*.[1] However we may try, it is impossible to disentangle time from this variable mental element, or to make it something extraneous and independent from the active processes of thought.

Time as Self-Consciousness

These facts are made more impressive by another consideration. In an order of time we must have both change and changelessness, that which flows as we have seen above, and that which abides, a time order and that which is above time. This paradoxical fact we find in only one place in the universe, in the person. Whatever the changes that take place in feeling, in experience, in physical and mental growth, the normal person has no difficulty in identifying himself as the continuing subject through all the experiences of change in physical, mental, and moral selfhood. The essence of the experience of selfhood seems to lie in the ability to gather all experience into enduring relation to itself in spite of the momentous changes that take place within its own nature. This grounding of time would not be complete, however, by reference to finite intelligence or persons alone. This is the point as yet unconsidered in this chapter. Time is meaningless to us apart from our interpretations of relation, but it is not made by us. It is a part of a larger system of relations which provides the field of human activities and more. The definition of time as the form under which we relate events is not a sufficient or complete definition. We must see time as a part of a general system of relations which includes all existence as well as our own. The Kantian definition of time as the form of thought under which human beings relate events is but partial and inadequate. The Kantian solution was not complete, and because it was not completed on the metaphysical side, we have that confusion which made so much trouble for Kant's disciples, and raised the inconsistencies of

[1]Reynal and Hitchcock, N. Y., pp. 181-182.

the master himself. He did not make time a part of the general order of existence. To be complete, any metaphysics requires this. It must apply not only to time and change but to matter as well. Kant tried to meet the problem by the reference to an unchanging and ultimate "thing-in-itself," an unknowable reality as powerless for creativity as it would be for explanation. There is no basis for metaphysics short of the reference of the whole cosmic order to a supreme, purposive, and personal Intelligence both in all and over all. The difficulty in this concept arises, of course, from the use of the term "person" which has customarily been used in too limited a fashion. The real significance of personality lies in its capacity for both immanence and transcendance which many hold to be mutually exclusive terms. These terms come together, however, and find their compatibility in the person. This is not to think of the Supreme Intelligence as an overgrown body but as the spirit which inspires all life and all creative thought, and which is very nigh us even in every one. It must be assumed that from this creative spirit proceeds the activity known as the atom, which grounds our ideas of reality, substantiality, and mass, and which momentarily creates into existence, maintains and upholds all things. "in whom we live and move and have our being." Such a ground of being is recognized more and more as a necessary assumption by our leading scientists, and without which there can be neither explanation nor causal connection. In this way alone is there reconciliation of the conflict between mind and matter. Working under the time order becomes then a possible cooperation between finite and infinite intelligences, an order to be assumed in the nature of things. Time becomes thus the instrument by which the finite and the limited may reach toward the infinite, the ladder of finite minds. Limitation and incompleteness may characterize it now but it is prophetic of a vaster world of experience when "time shall be no more."

CHAPTER VIII

Expanding Ego

IN *The Republic*, Plato represents the ideal person as a citizen of two worlds; the state which claims his temporal allegiance, and that other kingdom of his ideals and his future, the ideal state. There is perhaps nothing more characteristic of man than his capacity to escape all boundaries, to turn his attention on near and far, to draw the distant place and scene within the confines of his own heart. This power is the source of both science and religion. Perhaps there is nothing more contradictory about the paradoxical creature man than this spatial sense by which he discriminates between places, persons, things, situations, and ideas. All of these discernments he puts under the symbol of space which is altogether a matter of relationship, that bears meaning to persons. Henley, in his late years, could write in regretful strain of the misunderstanding that had separated him from his devoted friend Robert Louis Stevenson:

> O we that were dear are all to near
> With the thick of the world between us.[1]

Alas! How near can we be to some, and yet preserve how vast and emphatic a spiritual distance! This division we thus set up under the symbol or form of space is not illusion but meaning, and we shall discover if we study well, that it is closely related to that which we call "real" space. "Real" space partakes of the same quality, for it is division or discrimination that we set up in meaning, a disparateness of points of reference. As he chooses to consider it, a person may be affirmed to be present in his office, within sight of all there, or in his factory with which he has intramural telephone connections, or in the city, or country, or world, in much of which he can be immediately present through the use of radio, and possibly television—present and active. The space in which he may consider himself present is of his own choosing and action. He is present in some degree in any spot in which he can know or participate in "what is going on." There is no limitation to his space except the limitation of meaning. "Travel every road," wrote Heraclitus, "you cannot discover the frontiers of the soul—it has so deep a *logos*."

[1]W. E. Henley: *London Voluntaries*, David Nutt, London.

Since space is the relationship of meanings and discriminations in the real which the mind sets up, we then may be said to exist as living entities as far as truth and imagination can take us. We ourselves embody all that we can identify or really know.[2] The objects which our physical senses identify as "out there" are most truly existent "in here," within our consciousness, within our thinking, with the meanings our own minds assign. These meanings are our chief, perhaps our only certainties and on these we act The world "out there" must be first "in here" in order to have any meaning for human beings at all. In fact we have no means of knowing whether what is outside corresponds to what is within. But we must discriminate between ourselves and a world not ourselves, between ourselves and a world of objects, between ourselves and other selves, in order to catch the significance of reality. We do not make the realities, but we discriminate between them, and that discrimination is space. Space, then, may be seen as the form of thought, human or divine, under which things are discriminated and differences related. Reality lies in the relationship thus discerned, and we are brought to the concept of modern physics which sees space as no empty void but as a relation which exists between objects, and between objects and discerning intelligences.

Are We in Space, or Is Space in Us?

Such a question as this can scarcely fail to elicit the risibilities of the reader, but further consideration may indicate that there is more in the question than at first appears. Since the recent affirmations of physical science that space is relative, the fact that no space can be without objects, seems less ridiculous than when it first appeared in philosophical speculation. Here, as in the case of time, we have to meet the firm convictions of "common sense," that space is an emptiness to hold things, a convenient receptacle for the physical universe. On that basis it would seem absurd to question the independent and objective nature of space because to do so would seem to be to question objectivity itself. If space is a place to hold things, like the family closet, of course things couldn't be there without the closet, and that is the end of questioning for common sense. What common sense has not the patience to penetrate is that space thus erected into an objective order independent of meaning raises insuperable problems for the theory of thought. So long as the difficulties appeared to be in the realm of theory, they were lightly dismissed as the ravings of philosophic minds. So

[2]Boone: *You Are the Adventure,* Prentice-Hall, N. Y., p. 160.

complete was this indifference to the theoretical aspects of the question that it has been no little shock to the scientific world to be told by its own disciples that the necessities to a proper scientific understanding of such phenomena as those of gravitation and light involve the assumption that space is neither more nor less than the order of relation that exists between objects. Since the relation between masses can be expressed in the law of gravitation, it appears that the relations themselves cannot be infinite but are to be considered finite. Space is a definite relation that exists between objects, and apart from objects or possible occupation by objects, it is meaningless to both science and philosophy. Thus, at a stroke, we have the elimination from the scientific consciousness, of the age-old assurance of common sense that space is "out there" regardless of objects to fill it.

Space Essential to Thought

If we think first of how the spatial idea arises in human minds, we shall discover that a spatial order is demanded by the discreteness that makes thinking possible. Since this may be for some a hard saying, let us try to make the meaning plain. We think all the objects of thought whether material or mental by the device of discretion. We have to separate an object from the mass of other objects in order to make it the subject of attention. Our first mental world is a world of nouns. The infant learns to name things before he learns the meaning of action and relation as expressed in the verb. Unless we can make a distinction between what we are to think about and the rest of the world, we cannot think at all. The very earliest consciousness rests upon this power of discretion—the world of "me" as over against the "not me." We first realize ourselves as a unit of experience as over against a world not ourselves. This consciousness of "me" and "not me" is primary. Interpretations of experience cannot begin until the perceiving subject is able to discern between a self-world and a world less responsive. In the lower orders of life, consciousness seems to remain at this level. Consciousness without otherness would be impossible, even consciousness of a toothache. Thus we handle our world of objects and ideas by the power of discrimination. While there is a certain internal unity of function possessed by living organisms which is independent of our thinking, yet for the most part we determine our own units of thought, in accordance with the aim we have in view. In the case of a timepiece, we may choose our unity to be jewels, wheels, springs, cogs, the watch as a whole, watches in general, watch-using human be-

ings as a class, or the sidereal movements of the universe. Thus we acquire for purposes of thought our world of discrete objects under the concept of space.

Hence we hope it may now be granted that whatever reality may be conceded to space as an intellectual value, it is primarily the form under which we relate discriminated objects or concepts. This assumption is made more certain when we recall how our spatial ideas are modified by the time element involved. We use time as the measure of space. That space is also used as the measure of time does not constitute an objection. There is an unalterable and unbreakable connection between the two, though we are scarcely justified in asserting their identity. We state the distance of the stars in terms of the speed of light, and the years are but the time of the revolution of the earth in its spatial orbit. Everywhere our spatial ideas are modified by the temporal notion, which in turn, shows a dependence upon the spatial. When the oxcart is the only method of conveyance, space takes on a meaning far different from that which it assumes when the "continental limited" is a fact, and again is changed all but completely when transcontinental air service can carry one from New York to Los Angeles in the daylight hours. In somewhat similar fashion we reduce sidereal distance by enlarging our telescope to fetch the planets near for observation. At the other end of the scale of being we bring into the world of meaning a new world of objects hitherto unknown by the invention of the electronic microscope. Here our spatial reality is identified with our increased power of discrimination. We create space where it was before undiscernible.

Space as Mental Concept

In a space of discreteness we have been dealing merely with a space of units, or with the relation of objects considered as units in relation, that is, with linear space. A recent writer[3] makes the suggestion that the space of a leaf-eating worm is merely one of points. It has consciousness merely of what is directly in its path, living in apprehension of one dimension only. The higher animals, he suggests, like the horse and the dog, live in a two-dimensional world, being able to locate various points in a plane. The dog, in running, sees the landscape moving past him fanwise because he lacks sense of perspective. The end of the barn past which he rushes seems merely to lengthen itself into an oblique side of the building past which he has run. The suggestion is in many respects interest-

[3]Ouspensky: *Tertium Organum*, pp. 98ff.

ing though undemonstrable. Animal behavior is neither a safe nor a sure determinant of animal psychology for the reason that the interpretation rests upon analogy with self-reflecting human psychology. That is the stubborn fact which militates against the truth of much that passes current as animal psychology. It is the psychologist's mind read into the animal action. The only basis on which it could be true would be that the animal mind is like the human mind, which would be untrue to start with. There would be no objection, it may be noted, in assuming similarity in nerve response, which is a conclusion in physiology, but what behaviorist is ever content to rest here in his deductions? The human mind differs in that it possesses the power of reflection upon its own states of consciousness which enables it to create language, psychologies, social and political institutions, and the evaluations of ethics. This same gift is also the probable source of human perception of perspective, or three-dimensionality. Three-dimensionality seems almost certainly a distinct achievement, requiring a mental process. This is especially true of the interpretation of lines on a flat surface as having a three-dimensional meaning. It is difficult for the child in drawing to master the art of perspective. His first attempt at picturing a house is all in one plane. Frequently in viewing natural objects, the adult has to study a bit to get depth into his landscape. Sometimes he can by a shift of the eye and an act of will put it into the photograph. The infant seems to arrive at the idea by degrees, building it up by countless experiments. At first the roundness of the brightly colored ball is probably that of a flat disk which finally resolves itself into a sphere. The power to perceive in three dimensions is a power to master the world of objects under new aspects, and for practical purposes of life is all that is necessary. When additional relations are conceived or symbolized in a way to give meanings we advance to four-dimensional or even multi-dimensional space. We do this when we look at space from the standpoint of time. Time, introduced as a spatial element gives us a species of four-dimensional space. The establishment of "frames of reference" for use in the measurement of celestial distances is evidence that new relations of a spatial character may be added so long as they have meaning for the mind. Some may ask at this point whether all these conceptions are real. Do such complicated spaces actually exist? The answer is that they have a reality and an existence to the degree of their intelligibility and are aspects under which we may truly consider spatial relations. Our notions of space grow out of the relations which arise from the possibility of motion, and as

motion becomes more complicated, giving rise to new sets of relation, we can express these mathematically under the form of growing dimensionality. When we view space as a form of thought under which we express and master our world of relations, rather than an objectively independent place to hold things, the inconsistency of multi-dimensionality vanishes. The ancient conflict between practical and mathematical space passes away. For the average man practical space is three-dimensional. In it he can live, prosecute his aims, be happy or miserable. If it becomes necessary for the engineer or the astronomer to express the spatial relations of moving bodies, and to do so it is necessary to consider the relative speed of moving bodies, four-dimensionality has become for him practical space.

What Does It Mean To Be Present?

Under such a view what does it mean to be present? Do we not by using the term "present" indicate the degree of our mastery of the spatial situation? We are present in a building, however vast as we think of the confining walls as a frame of reference. We are present in an open space as far as we can see, be seen, or heard, consider ourselves to bear relations to these surroundings. We are present in the city, but such presence would be inadequate for a friend who was seeking us. We would really be much more present to that friend at the end of a telephone line even two thousand miles away, if it were impossible to make the trip across the city. The term "present" will have a still different content if the time comes when radio-television enables us to take an instrument from our pocket and talk to a distant friend at will. As the mental order of space arises out of the necessity for definable relations between objects, and as the spatial implications grow with the capacity of the mind to master relations, the suggestion arises, that from the ontological standpoint, the necessity for thinking in terms of space may be due to the limitations of minds which can conceive only a small number of relations at once. As the infant mathematician has his budding mathematical powers educed through the use of illustrations of apples, dogs, or soldiers until he is able to grasp the relation to their number of the arabic symbol 4, so it is necessary for us to use dimensional frames of reference to make meanings clear to human minds. Should there come to us a privileged time when all relations could be grasped at once, our present spatial order might vanish altogether, at least as we now conceive it.

Space and Cosmic Intelligence

How shall we escape the claim that space as we have considered it here is mere illusion, the product of a human mind having no place in reality? Obviously all human beings are bound by certain necessities of space that hold for all, which the person does not make, and to which we must submit. Space must be admitted as a part of the world order. Could it have any meaning for a Cosmic Intelligence? If the Cosmic Intelligence is conceived from the theistic standpoint he must be related to it as its creator. Since he is thought to have created a world of relations there must be some sense in which he limits himself by that which he has created. The important question arises whether this limitation is imposed from without or self-imposed. If self-imposed, for reasons that seem good and an end in view, it may be a step not of limitation but to a larger self-realization. The difficulty is not one that affects the character of God, but rather the mischievous term "absolute," which means unconditioned or unrelated. If the term is used in the strict sense, it would mean that the Creator is unrelated to the world of his creation, which is a contradiction. Creation of any kind is a self-limitation and is to be judged by the end in view. But how, someone remarks, can the spaceless get into space so as to bear a relation to it? This seems an unsolvable mystery and paradox. Nevertheless it is a mystery we all experience in a limited way. Our own mind is not a spatial object, we can in no sense locate it. It outruns any boundary of spatial dimensions we may try to set for it. It is not involved in the narrow limits of the spatial relations that beset the physical brain and body, but in a moment can be off from present surroundings to distant sun and stars. Not only so, it commands these spatial relations, masters, and sets at work streams of activity which remain long after it has "flown to other worlds and other wars." The relation of the spaceless to space, is from the standpoint of explanation unsolvable, but it is at the same moment experienceable, wrapped up with the mystery of personality.

Out of these conclusions one further fact impresses itself, having a deep significance for our own time of isolationism, parochialism, nationalism, making desperate efforts to constrict the thinking of the world: our world is as large as we choose to make it, and we are as great as we choose to make our world. If we narrow it down to the mean and the petty, it is our own fault. For the world is as broad as our sympathies, as wide as our knowledge. Whatever we take in of distant scenes and peoples becomes a part of us. We likewise can-

not escape becoming a part of it. The age to come is not an age for the narrowly educated, for those who are only technically trained. The times open for us long vistas to be explored, and the more we stretch our comprehension to take in all languages, races, peoples, and civilizations, that shall be the degree to which we may surely be said to have lived. This is the type of thought demanded by our coming world. In the power of such a thought we can repeat what Thoreau has somewhere written:

> So my life sails far
> to double some far cape not yet explored.

CHAPTER IX

The Eagle's Flight

"TO THE EAGLE'S FLIGHT, THE WHOLE OF HEAVEN IS FREE,"[1] wrote Euripides whose sense of the tragic elements of life, and whose longing to escape the necessities of time and place were so like the aspirations of our own calamitous days. The more men feel the limitations of time and space, the more does the soul call out for infinity. In our rapidly shrinking world the call becomes clamorous. The longing seems to be very naturally allied with the presence of the space idea in the minds of men. A homesick child was once asked to look upon the evening star, visible alike from the old home and the new, and in this thought to be comforted. "But," replied she, "the hills shut out all the friends I love." The hills of time and sense seem to shut us out from the far places of our longings. The desire for infinite spaces arises from a nostalgia of the soul which seeks its natural home beyond the boundaries of time and space. The capacity of the person to transcend and to be superior to both time and space calls continually for exercise. There is ever the ancient cry, so characteristic at least of Western imagination, to "go over past the ranges at the red gods' call."

We can conceive no space beyond which there would not be still further space, and in our imagination we add more and more until we are lost in an infinity of distance which outreaches our finite comprehension. For this reason, infinity has come to mean that which reaches after the perfect or the absolute, which is beyond human capacities. We set up the Absolute as perfection through our sense of human limitations, and imperfections. It is this condition of the human mind that raises the demand for religion, which is the effort to link ourselves with the Supreme Perfection, in which we are ourselves so lacking and which yet makes upon us such inexorable claims. Here in great part is the source of tragedy. We must strive toward a perfection which we can but partially realize. As we go forward there are opening vistas ahead of us, which outstrip forms, codes, and conventions, and arouse in us a longing for perfect freedom. Tragedy lies in the wheel which Ixion must futilely turn forever, and in the stone which Sisyphus must repeatedly roll up the hill. These limitations give rise to the human sense

[1]Fragment 1047, Nauck, as quoted by Jaeger, *Paideia*, Blackwell, Oxford, Vol. I, p. 354.

of futility, which does not disturb the animal, and which is the token of man's immortality. The only surcease from such sorrow is given by faith, faith that the Absolute, the perfect shall somewhere be achieved. This faith is as essential to scientific discovery as it is to religion, and becomes the working basis of human progress. Such faith is the compelling element in scientific, social, and religious advancement which mocks at the impossibilities of less daring spirits. Such faith is the mainspring of the pioneers in every realm of activity.

To men and women who have objectified the Absolute as the goal of their striving, it seems an impiety to suggest the essentially fictional nature of the Absolute. Nor would anyone be willing to make such an implication were it not for the misuse to which the idea of the Absolute is put. This misuse lies in the objectification of the Absolute as humanly conceived. These concepts are characterized by all the limitations of human thought. They are superior to the figures of wood and stone set up by primitive peoples and worshiped as God, but they partake of similar shortcomings. Concepts set up by human minds or even conceived and understood by human beings under the shock of revelation can never be infallible in the sense that they are not subject to revision, or to correction by further revelation. Should someone object that by this reasoning God is placed in the realm of the fictitious let him remember we are speaking of the human concept of God. The concept of God is fictional only in the exact sense in which the concept of the atom is a fiction. Both are human attempts at the interpretation of fundamental realities, but both are subject to further light. This must be so since God reveals himself in historic time, and human understanding of the Divine Character and Will must grow with the Divine process in history. However infallible revelations may be, interpretations of revelation are subject to very human constructions. Infallible revelations call for infallible interpretations and interpreters. The concept, raised to the rank of an absolute, though imperfectly apprehended, becomes static, immutable, sacrosanct, not open to question or investigation, an idol to worship, or a standard of orthodoxy, instead of a flying goal to achieve. Religion dies and theology takes its place. The late Professor Bowne used to speak of the people who thought they had experienced religion when they had only experienced theology. Following this pattern, the Absolute is set up as something forever finished, complete, immutable, is named God and pronounced forever above and beyond contact with the finite. The result is that religious faith survives

only by ignoring these primary theological assumptions. In place of a living God, acting in and through the world-process, capable of human association, we are given one whose very perfections make him unapproachable. He can get into the world of nature which once he created only by the breach of natural laws which he has ordained but to which he is unalterably opposed. His presence can then be accounted for only by miracle. Thus the power of religion in the social order is nullified. Driven out of man's present life and circumstance the forlorn hope left is in "crisis," whereby alone the Absolute can disrupt the natural order and get back into the world from which he is assumed to have fled. Rightly understood, however, the concept of infinity, the eagle's flight, has a most practical place in both science and religion provided in neither case it is erected into static scientific or religious dogma. This is not to deny the Absolute, it is only to affirm it as the goal of perfection, which we cannot yet fully appreciate and understand but which must be the mark after which we strive, for he who seeks less than perfection shall never reach his best.

Infinity as the Incomprehensible

The relation of finite to the infinite has been the standing puzzle of speculation since at least the days of Protagoras. The finite is that which we know, the infinite is that which exhausts knowledge. Mathematical science, particularly in our own day, has made the definition of infinity its special care. Though it represents a very definite mathematical concept, its existence is confined to the realm of rational notion and relation. It can be expressed only in symbols. It is above all, a convenient device for handling inexpressible ideas. Though its use be of the utmost practical value, it is a symbol for that which is really beyond computation, up or down, for magnitude or smallness, or to express a law of variation. Keyser declares[2] that by the term "infinity" mathematicians do not refer to a definite quantity and that the ratio becomes equal to it when x divided by n equals zero, because such a division would be meaningless, but rather that decreasing in the proportion indicated the ratio becomes greater than any finite amount. Cantor[3] makes the distinction between the proper and improper infinite of mathematics, using the term "proper" of the infinite as applied to magnitude, and "improper" as applied to the point aggregates or manifold, as when we divide a line into an infinite number of points.

[2] *Mathematical Philosophy*, p. 303 *passim*.

[3] *The Theory of Transfinite Numbers*, pp. 18, 55.

Frequently the Infinite is postulated as an active agent, as when personality is ascribed to the Absolute, or Law is assumed by science as an actor, a causal agent, thereby setting up a contrast, an irreconcilable conflict between finite and infinite. Then having made the two irreconcilable by definition, the effort is made to reconcile the disparate ideas without realizing the problem to be purely verbal. The leading characteristic of infinity is that "it is beyond comprehension." And this is true in any field in which the term is used. Even the infinity of physics does not deal with demonstrable phenomena. When phenomena pass beyond the range of demonstration and factors are needed to balance the equation, we put the burden on the infinite. We see at once that theology is not the only field that uses the symbol "infinity" to account for the unaccountable. Infinite spaces are either too small or too great to be commensurable. It is applied alike to the foot rule or to sidereal distances. Applied to time, infinity is likewise the confession of our mental shortcoming. Nor is the case essentially different in the realm of religion. Here it is the assumption that we cannot account for a world that is beyond our understanding by merely introducing the understood. This gap of inadequacy is filled by reference to an Infinite. The assumption which religion finds necessary to religious solutions stands, however, on just as sure a footing as the scientific assumption and is in nowise inferior to it.

Infinity a Practical Concept

The concept of the infinite though it is beyond the reach of the understanding, or even definition, yet persists in holding a place of importance in the various fields of thought. It might seem, that being an unknowable mental fiction, it might well be discarded. Some who base their suppositions on it in the realm of science, as if it were of the utmost factuality, would refuse its use to religion. Why then does the term persist in the face of a possible charge of unreality? The persistence is due to the practical value of the concept. We could not get along in physics, for example, on the basis of disbelief in solutions. Questions have to be left open, and the symbol of infinity is a symbol of faith and hope that secrets may eventually be unraveled. In science we assume by faith the possibility of knowledge. A frictionless pulley is something that has never yet existed on sea or land, but we compute the law of the pulley as if a frictionless pulley were the veriest fact of experience. We base upon it our law of the pulley, for only so can we get away to workable approximations. There are many similar fictions which justify

themselves in science, such as conservation and transformation of energy. These are not justified by exact scientific demonstration, but yet possess such practical value that without the assumption computations would be at an end. The Infinite in religion is an application of a like principle. Called upon to "demonstrate" the existence of God, the religious believer might quite as appropriately call upon the scientist to demonstrate a frictionless pulley, or ether, or atoms, or electrons. There are still to be discovered surviving scientific Gradgrinds who object to any figure of speech unless it can be made to run on all fours, that is, in any other field than their own. We cannot get a proper view of the relations of human life, nor of the highest achievements of the person, except by assuming the perfectibility of human conduct. As in perfect mechanics the dream of perfection is necessary as a working basis. Not altogether unlike his mathematical brother, the religionist accepts on faith the belief that actual infinity is the profoundest of cosmic realities, and thereby rises toward the growing goal of perfection. To take a lesser ideal would be to fall far below one's possibilities and to miss the mark altogether. The materialist has no more reason to slur the religious man for failure to realize the perfection of his ideal, than the religious man would have to claim fraud or hypocrisy in the physicist for inability to make a machine capable of turning in the amount of power prescribed in the "frictionless" equation. Just as science rests upon a fervent hope that knowledge may grow from more to more, so religion is based upon a faith in a condition, a place, or a world in which man's dream of moral perfection may be realized.

The Inexplicable not Necessarily Nonexistent

The notion of infinity should never be used in a merely negative sense and for purpose of denial. The failure to grasp infinity or the realities for which it is made to stand does not prove its nonexistence. Our mathematical friends would justly resent the implication that mathematical infinity represents nothing. The physicist would not be far behind in disapproval if we were to deny reality to all he attempts to express under that term. We should discard the fallacy that nothing exists that we cannot comprehend and explain. As is the case in the field of science, we cannot deny reality to a theological infinite. We cannot argue its nonexistence, but must rather find in the notion a confession of the limitations of human knowledge and at the same time the evidence of a supreme faith as a working basis for the higher life.

The classic example of the problems arising out of the assumption of infinitude was furnished many centuries ago by the Eleatics.[4] Scarcely a schoolboy but is acquainted with the paradoxes of Zeno,[5] whereby it is "proved" by the infinite divisibility of space and time, that Achilles would never overtake the tortoise, because as he took one step the tortoise would also take one, and the flying arrow is forever at rest because if we attempt to locate it, it can be placed only in a definite spot and therefore it must be considered at rest. Such problems seem, with some, never to have been satisfactorily answered and they are still the subject of discussion in books and journals. The problem is of course purely academic, and it arises like many of those in theology because of the hardening of convenient symbols into an attempted factuality. We assume that space is infinitely divisible when it is not practically so. Then we erect the definition into a precise and independent reality, and make it the foe of the actual. The paradox arises from our insistence upon treating the impractical as if it were practical. Equally embarrassing questions can be raised concerning a thousand devices of life by which we assume the perfect in order to achieve the possible. All such verbal difficulties are compelled to fall before the practice of life. Life is never lived under ideal conditions and we must learn to conform to the practical, and to accept approximations. If someone arises in our midst to condemn such approximations as "compromises with the Evil One," that we must have perfection or nothing, it is only necessary to remark, that perfection is of ideals and even those are incomplete approximations since they depend upon the interpretation and understandings of the people who hold them. One is reminded of the tale of the civil engineer who would consent to wear clothes only on condition that the tailor should take his measure with a transit instrument. Such pedantry though it pose as religious, can scarcely be taken seriously. In the world there is room for much that is fancy, for much that is dream, but that which begins only in dream often ends in great accomplish-

[4]See *The Personalist*, January 1924. Art. by H. Wildon Carr.

[5]The writer is not unmindful of the ingenious devices of one-to-one correspondence in parallel infinite series whereby the paradox is dissolved in seeming, but he is not yet convinced that this solution is more than a clever begging of the question. Such a solution may answer the requirements of mathematical demonstration, but bear no relation to the practical solution. If it is remarked that the paradoxes did not arise out of practical situations and cannot be answered practically, it would seem as futile as the working of puzzles, to spend much labor on problems that have no bearing on life. The introduction to Cantor: *The Theory of Transfinite Numbers*, provides a description of the correspondence theory. Consult likewise, Huntington: *The Continuum*, chapters I and VI.

ment. We cannot say what life would be worth without the realm of fancy which opens new vistas before the mind and makes the outland of the infinite less mysterious as it pushes back the boundaries of the unknown.

Infinite or Absolute in Theology

In closing the discussion it is scarcely necessary to add that the difficulty of the relation of the finite to the infinite in religious thought is also largely verbal. In practical living the infinite is to be experienced rather than explained. It means simply that men are to live as if the infinite were possible.

Out of such an assumption many persons have achieved such approximations to living perfection as to stir our wonder and feed our aspiration for goodness. We cannot explain how the infinite can manifest itself in the finite, nor how it can create and sustain it. Certainly it cannot if we are to hold to the thought of the infinite as Absolute or unrelated. If the Infinite is conceived as that causal agency that outstrips our knowledge and understanding, "the same yesterday, today, and forever," in the sense of undeviating and sustained moral purpose and love, there is no reason for assuming that it could not manifest itself in the finite. What we call the finite may be but that part which is open to our understanding, and our comprehension is subject to revision and growth. He would be unfortunate and something less than religious whose concept of God did not grow with his experience. All that we can know of infinity is what can get expressed in our own thought and experience. On this side of the equation, the known, we have certain undying certainties, concerning which mathematical-wise we write: $(r = \infty)$, or the unknown *equals infinity*. We do not intend to throw away the known values because there may be others we cannot yet comprehend. The mathematician would be compelled to cease his research did he discard his *unknown*. Neither shall we, so long as we have evidence of the practical values to be realized under the convenient symbols of God, Freedom, and Immortality. Within the heart of the person is astir the "eagle's flight" to which the whole heavens are open because the Creator of all has set eternity in his heart. There is a sense in which the struggle toward infinity is to be identified with infinity, the Infinite realizing his infinitude under the aspects of time and change, which is for some a nobler concept than that of mere immutability, as having relation to a Living God. Even so, the dream of a world of perfectible human relationships becomes at once a challenge and a command to the human spirit.

CHAPTER X

Second Wind

WHO has not experienced the curious phenomenon described as "getting his second wind," that power which follows on apparent exhaustion, by which the deeper forces of the body are called upon to carry on. It is as if voluntary effort were no longer needed to keep up action. The body seems to function at its tasks automatically. This experience does not apply to physical exercise alone, for there are mental and spiritual resources which seem to underlie the physical, and which can be tapped when the crisis demands. These are energies of which we are mostly unconscious when life goes easily along with no unusual demands made upon us. Successful men often date their really effective efforts from some disaster, crushing disappointment, or overthrow, which early left them without apparent resources, and which threatened the end of everything. Few are the men who have won a genuine place in the world without this initial jolt. "First wind" represents surface power, half effort, and we do not reach the enduring qualities that enable us to carry through until we have begun to draw from the deeper sources.

With all our scientific study of the external world and a knowledge that has now increased to a point of disclaiming any certainty of ultimate or metaphysical reality, comparatively little attention has been paid to the one source of indubitable experience, the person himself. Yet here lies the point of contact with all reality, the fountain of all knowledge, and the source of creative efficiency as well. There is possibly no field of research offering greater returns, but the temper of psychological investigation has driven so strongly in the direction of behaviorism, in a vain effort to ape the mood of a now discarded science, that the nature of the person, his relation to the understanding of the external world, the essence of knowledge itself, these present an all but unexplored field. And yet for the utilization of unexploited powers and the future advance of society there is no sphere of research more important. One reason for the relative neglect of this inquiry is that empirical science has been so fearful of subjectivity, which it could not avoid even if it wanted to, that it has not dared to look into its own mirror for fear of shock. So its retiring and super-modest efforts to understand the human

person have been satisfied with the study of "animal psychology" (a pale reflection of its own reactions), a denial of the existence of the self (an abrogation of its own field of research), or an attempt to learn about the healthy self by concentration on the diseased and abnormal. If the scientific-minded psychologist has reversed the dictum of Plotinus, who confessed he was ashamed he had a body, by confessing shame at the admission that he has a soul, thereby turning honest investigation away from a most important subject, the situation has been still further befuddled by the crackpots. These are the people whose gullibility is exceeded only by the extravagance of their claims of psychic power, materialization, and other ghostly manifestations.

The field, so little cultivated, is approached therefore with some misgiving, but with an effort to steer away from dogmatism, because of the importance of shedding even the slightest light upon the subject, so generally ignored by the professionals.

Below the Threshold

In the thinking of many, the subconscious is even more important than the conscious life. However much truth there may be in the contention, and there seems to be some, we should not forget the necessary relation which exists between any so-called subconsciousness and conscious selfhood, if the subconscious is to appear in the conscious. We should recognize the fact that the subconscious and what is ordinarily included when the unconscious is spoken of, has no existence apart from the conscious. The term "marginal consciousness" is probably more expressive of the fact. The term "threshold" should be recognized for what it is, a convenient figure of speech without analogy in human experience. What does happen is that there are greater and lesser degrees of consciousness, dependent upon the degree of attention, and it is possible for the mind to recall past events and to give them a new vividness of presentation. The convenience of the term "threshold" easily becomes misleading when it gives rise to the notion of certain "basement" ideas as being in existence and out of it at the same time. Ideas exist by virtue of being thought. They cannot be said to linger, or to reside, in mental cellars or garrets, apart from the act of thinking, yet many volumes of discussion have hung upon the misuse of the term mentioned.

When careful consideration is given to the facts, it will be found that the distinction between conscious and subconscious lies in the degree of attention. The mind works with such swiftness that it can attend many ideas in an inconceivably small portion of time. While

the main attention is being put upon a matter of immediate moment, other objects and events are claiming and receiving subsidiary attention. The scholar in his study, absorbed in work that demands close attention, and that seems to command his entire interest, becomes conscious when the task is done that while he was at work someone entered the room, or he may recall the striking of the clock, and now reproduce the number of strokes to give him the hour. While there is the field of main attention, there is a larger field of lesser attentions. To get results on a complicated problem, it is advantageous not only to be able to concentrate but also to give place to the problem in the field of general attentions. For, while the mind is selective of the things upon which it wills to bend attention, it selects seriously only under the spur of purpose and the purpose can be made to persist when other occupations seem to fill the horizon, as one must frequently turn to another interest in order to recall a name that escapes him. Thus it is possible to have a main drive of life to which even the "unconscious" moments contribute. Thought, unmotivated, breaks down into mere reverie or fancy. True concentration on a subject is to be achieved by this wider motivation which comes of long discipline, and gives cumulative effect to experience and study.

Reflection will show that the relation of the subconscious to the region of dreams, ideals, and duties is very close, because whatever can be gotten prominently before the mind in this way becomes the subject of exhaustive consideration. Until our work gets into the field of subconscious attention, it has not "gotten on our hearts," as we say, sufficiently to make us outstandingly successful at it. To "get it on our hearts" is to profit by a less voluntary attention. Attention may be consciously willed, as when we try to drive ourselves to recall a name, and find ourselves more inhibited from it the harder we try, and then immediately the strain of direct attention is removed it "pops into our head." Forced attention seldom yields the results in creative originality that is afforded more leisurely commitment to the larger field of consciousness. We cannot become adept without this involuntary reference. The voluntarism of the bicyclist may be as good an illustration as any Movements which began with intense exercise of will must give way to lesser attention before the individual becomes an expert. An intense attention upon a stone in the road is the sure way to hit it, and the cyclist soon learns to look away from the thing with which he does not wish to collide. When habit has laid down the necessary motions they are removed from the strain of acute consciousness. Thus it becomes

possible to saturate the mind with our main work, so that intervals that are not pre-eminently occupied with exacting attentions allow them to rise into the field of consciousness. It may be only momentary to be sure, but a connection is being made between variously achieved ideas, and eventually we find our problem unfolding itself before conscious attention, and presenting the solution.

If direct consciousness is to make the greatest gains, it must have a well-determined background in the subconscious. To attempt work without this background is to work without perspective, and indeed, without full utilization of one's capacities. It is like a picture without depth. For this reason the writer demands leisure, the inventor solitude, or the man who would live righteously, hours of worship, prayer, and reverence.

Utilizing the Subconscious

A prime factor in success lies in the utilization of the subconscious. It is as impossible for the mind to be kept at a single strain of attention as it is for the soldier to hold for long the position of "attention" on parade. Left too long at attention, men begin to drop in the ranks, where standing "at ease" would not have been noticed. The mind which has enriched the subconscious by motivating dreams and ideals has introduced elements that will tend to keep his life true to those ideals, in the midst of other distractions. The bank clerk whose dreams are of what can be done by speculation with the bank's funds, and who allows himself for a moment to dwell upon the possibility of surreptitious borrowing, has introduced into the subconscious, influences that may have power to overcome the best of intentions. By admitting such mental pictures his will has already begun to act in the wrong direction. His dreams give the set to life and his rectitude is breaking down. By-and-by the subconscious dreams become stronger than the conscious willing in the opposite direction. The larger field of his desires will speak, breaking down the artificial barriers, such as fear of discovery, of the attitude of the community, and, as if by some inner compulsion, he finds himself doing that which he had often declared to himself he would never do. It is not necessary to dwell upon so painful an illustration further than to reflect that the same principles, in this case wrongly applied, may equally well be put to work in the interest of right action and success. He who writes into the subconscious life, dreams and ideals of nobility, unselfishness and sacrifice, is gathering capital for ethical action which will hold him in the tides of temptation to evil, when

the strain of more direct attention would be too great. It is then that the larger reserves of life pour in and the man finds himself instinctively drawing back from the contemplation of wrong doing, or moving instinctively ahead to accomplishments that seem natural and prepared for in advance. Thus the subconscious becomes the determining factor in a career. The actions of men in crises of any kind are revelations of the subconscious ideals which have been cultivated and cherished in less strenuous moments of life.

Inner Harmony

Harmony between the conscious and subconscious ideal are thus seen necessary to successful living. The discoveries and advances of modern psychology disclose to us this fact in forceful manner. We hear much of inhibitions, complexes, and conflicts. These arise from lack of harmony between the outwardly willed and the inwardly desired. This is not altogether a modern discovery. It is the basis for the statement that man "cannot serve God and Mammon," and of that internal conflict which every man discovers in himself between the spiritual life and "the body of death." We may force attention upon righteousness without really desiring it in our innermost being. We may, under the spur of social influence or shame, *will* to take the high road of sobriety and truth, while our desires are far from it. The external will cannot long survive the strain of such double allegiance, and the life moves in the direction of its desired interests. The subconscious, which is the real will in the case, working day and night in reverie and in dreams, and in the waking intervals between attentions, has been preparing the main drive of life. It can so becloud the ethical issue as to deceive us into a substitution of wrong for right, as we "alibi" ourselves for not taking the direction which in normal moments we recognize as right. If now there is repression by a strong act of will, and there can be, so long as the deed is not committed, we may have what the psychologist calls an inhibition or conflict. According to the degree to which we have cultivated the inner desires, and the strength of the opposition from without, the person may suffer from hysteria or partial insanity, or dissociation of personality. The cure is restoration of harmony between the conscious and the subconscious will. The Freudians have sometimes falsely assumed that harmony is desirable at any price and so recommend giving way to the subconscious wish whether it be good or bad. But that is only to fasten and increase the conflict

since man is a moral being and can never escape the condemnation of the categorical "ought." The curative way, which modern psychologists attempt to avoid, because "it is not done" in scientific circles, is the clearing of the subconscious field by what in religion is called conversion, the active setting of the subconscious will upon the pure, the noble, the true, and the just. The outcome of the other method of treatment is easily illustrated in common experience. Some advise, for instance, that if the victim feels he wants to swear, he should get it out of his system by yielding to the impulse. The result is that the relief is but temporary. The oaths become more and more terrible and the relief less and less, until the victim uses profanity unconsciously, and is no longer horrified at expressions that shock all the bystanders. He is forced for satisfaction to increasingly lurid but ever unsatisfying expression. This giving way to one's inner desires on all occasions is the weakness of some modern educational theory which ends by unfitting the child for normal human association and cooperation. One such kindergartner is reported to have told the teacher, when advised or urged to some cooperative action: "But Flo, you know I have to do just what I want to do." Thus we poison the springs to well-ordered living.

Dissociated Personalities and Divided Wills

The conflict between moods of thought gives rise to the "split" or dissociated personality. Here too, if there is to be genuine recovery, we must go back to those sources of willing which have to do with the choice of ideals in the creative imagination. If the subject can be reunited in the mental and spiritual sources of external will and internal wish, he can regain self-control.

One other problem springing out of the lack of unity between the conscious and the subconscious demands discussion. The failure to relate the experiences of the one to the other in a harmonious disposition is the source of all sorts of religious, social, and political aberrations. This is the pathological element present in various forms of religious fanaticism. Fanaticism is to be distinguished from religion by the incongruity arising between its so-called "religious experiences" and its ethical achievement. Two sets of subconscious experiences have been at work. There has been a divided will. On the one hand has been the demand for a perfect holiness, on the other a realization of actual sinfulness. There is conflict between the two, and it is easier to lose one's self in the contemplation of the good than to proceed to fulfil the demands of right-

cousness in actual living. Thus the inner contemplation rather than outer fulfilment becomes the standard by which the victim of fanaticism judges his own and other lives. He no longer brings it to the test of action but only to that of "feeling" or beliefs, or of standards unrelated to social and ethical duty. The subject allows the conflict to take place entirely within, not giving it external satisfaction or expression. On this phantom field he fights his battles without that harmony between the inner and outer life which comes with the achievement of righteousness in the common associations and becomes more intolerant of others, the farther he departs from his own ideals. It is probably easier to become a whirling dervish than to be a righteous and responsible citizen. Subconscious ideals of righteousness which do not find outward expression in work for one's fellow men, in the common tasks of life, staying in the realm of the ideal come to make all sorts of fantastic demands. Great moment is accorded to artificial and nonessential standards. Matters of little account are erected into great sins or sacrifices, but in spite of all the struggle, there is no real harmony of the inner spirit. A conflict arises between the demands of obvious duty and a fictitious righteousness. The victim of fanaticism is then in the position of a known instance, to fly from the real duty (and distasteful one) of nursing an invalid, to the "higher" duty of spending the whole day in prayer for the recovery of the sick by Divine healing. It is high time that Christian students and scholars tear the mask fearlessly from this suppositional type of religion and reveal its real poverty and shallowness.

CHAPTER XI

In the Beginning Is the Act

THIS TITLE is not meant to raise the ghosts of an ancient theology with which the frustrated Faust concerned himself in the famous Goethian soliloquy, where he came to the conclusion that the opening lines of the Fourth Gospel should be interpreted: "In the beginning was the *act*." The desire is rather to call attention to the relation between human action, human will, freedom, and personality.

A curious result of the mechanistic thinking of our time is to be seen in the effort to provide scientific sanction for a postulate which in spite of wishful thinking everyone knows to be false. The modern denial of freedom has had most serious repercussions in all departments of human activity. The paradoxical situation is this: that the condition prevails in a psychology which has freely traded its soul in order to be considered a science. It has done this also at the very moment that science begins to talk of contingency in the realm of the material, and repudiates determinism in matter. Thus much present-day psychology finds itself impaled on both horns of a dilemma in which it stands to be rejected both by common experience and by science as well.

The serious aspect of the situation is discoverable in the ideals of a generation that has been trained to despise morals as having no ground in reality since we are told we must inevitably follow unrestrainable impulses. Only the instruction of right-minded teachers and responsible parents, and the moral sentiment cultivated by the churches, added to the common sense of the younger generation who know they are free in spite of the behaviorist, has saved us from a complete moral debacle. As it is, the flabbyminded and the morally untrained believe themselves scientifically excused from self-restraint.

In the political field the assumption is made that since men are not free to think for themselves, their ideas can be controlled by propaganda. This contempt for the freedom of man has introduced the dictator (who is certain that only his own ideas are the proper ones), to restrict information and deny the right of free discussion. These totalitarian influences permeated every section of society, high and low, and invaded every land, until they engaged in dead-

ly conflict to determine whether freedom itself should persist.

In the realm of business and industry a similar perversity exists. Men feel free to engage in the shadiest transaction on the plea of the "compulsions" of business success, and to justify their actions by sharp perversions of the laws, and the appeal to the doctrine of the struggle for survival, in which only the survivors are deemed "fit" to survive. This application of determinism grants a bonus to the most unscrupulous, who can admire his avarice and cut-throat success as a law of the universe.

Even organized religion has been enfiladed by this same denial of freedom. Many have lost confidence in the personal nature of righteousness and doing so have overlooked the condition which bases morality, namely, that it can exist only as it is free. No invasion of the personality of man, even on the part of God himself, can insure a single act of morality. Because this fact has been obscured by the determinism of the time there are those who look for the moral delivery of the world through the power of St. Michael with his sword, a moral purge to free us from the ungodly. The belief in salvation by cataclysmic compulsion overlooks the connection of freedom with moral character and suffers renascence through a belief in popular deterministic psychology. Thus it comes to look not to a future rehabilitation of the world but only to its eventual destruction in the face of a hopeless moral situation.

Influences so potent and widespread in modern society demand discussion on every hand, by any member of society who feels he has a contribution to make.

Why Is Freedom Denied?

There must be strong reasons why the denial of the will, a doctrine so repugnant to common sense has achieved wide and powerful influence, and these grounds must be frankly faced and considered.

Perhaps the most common objection to the belief in freedom arises from a misunderstanding of the scope of freedom in human choices. By many, the advocate of freedom is assumed to claim for human wills and choices, not conditioned, but complete or absolute, freedom. The argument runs that we are entirely free to choose or else we are not free at all. It is easy to point out the restrictions on freedom until the field of choice left seems so small as to be negligible. In actual life, the individual finds himself hedged in by circumstances of birth, of environment, of intellectual capacity, of social prejudice and tradition, of education, of

skill, and of poverty, and even of physical weakness, over which he has no control. These barriers which brave souls overcome, and in the act acquire new powers, remain unbreached by the multitudes, and often through little fault of their own. The easy way of self-excuse for the individual is to assume that the barriers were insurmountable, and self-excuse is much easier than struggle against odds. It is easy for the frustrated, the disappointed, and the lazy to believe that having only a limited freedom, they have none at all. Freedom is not reached at a bound, it is a plant of gradual growth. The conquest of the first step of limited choice, the little turning of the road so easily missed by the inattentive, is necessary before a larger freedom can come, but this the denier of freedom will never see. As in Emerson's poem "the hypocritic days" come veiled, their opportunities hidden, except to those who possess the insight which comes of watchfulness.

Another reason for the disbelief in freedom arises from the common misplacement of the act of choice, which is often thought to occur only at the culmination of the deed. Choices are prepared for and even actually made, long before they are carried into effect, but the open and final struggle, before the act, is viewed at the time when the decision was made, and then we find ourselves beset by an inner compulsion which we know we ought to resist but which we feel we cannot. In such a case the course of action has long since received consent in the inner recesses of the subconscious, by dwelling in the imagination on the illicit desire, with the result that when circumstances conspire, all barriers of will are broken down, except the artificial ones of convention and social disapproval. Desires are yielded to, and choices are made by allowing them to have previous places in imaginations, desires, and dreams, however surreptitiously they are indulged. Many are the men and women who dare not look their inner motives in the face by an act of introspection or confession. Thus the basis is made for the wrong ultimate choice, and the decision has more or less passed out of the hands of the conscious self when the hour of action finally arrives. Willing goes more deeply into the subconscious motives than is ordinarily supposed. Men carry on conflicts within themselves, consciously attempting to drive their wills in one direction, while subconsciously allowing their desires to dwell upon the opposite course of action. From such sources we have the so-called complexes and inhibitions of the psychoanalyst. We cannot hope to achieve the difficult desire to which our whole personality does not give consent, both the conscious and the subconscious. Creative willing

demands completeness and singleness of purpose, and the source of this lies within the very center of personality, is the essence of the person. Hence we are not only what we achieve but also, in some degree, we are what we contemplate being. He who has begun to dally with the dream of a course of action, though his lips are saying "no" as rapidly as he can talk, has already consented to it, and if it is a wrong course of action, has already entered into temptation by giving the thought place in the creative imagination. We can scarcely hope to dream of, dwell upon, and love one course of action, and then in the supreme moment be able to stem the flood in contradiction to our inner desires in the interest of appearances, conventions, or manners. This fact of the selfhood has also its positive side for the personality which long beforehand builds up the background of desirable choices, by prayer, worship, confession, and meditation. It is possible to concentrate the whole life in an effective way toward any legitimate calling or occupation until the individual finds himself moving toward accomplishments which seem to him fairly unaccountable, so unconscious is he of the multitudinous steps by which they have been achieved. Another power seems to have been working in and through him.

A misunderstanding of the nature of psychic law contributes also to the denial of freedom. Restricted uniformities of psychical action are discovered and given the name of "laws." Then it is easy to forget that uniformities of action are not themselves causal, and carry with them no necessary compulsions. We call law that which is only usual, necessary, and determined. A conversation is recalled between two Boston "Blue Stockings," overheard in the lobby passing from a Lowell Institute Lecture on the "Epochs of Faith." The first sister confessed she could not gather the causal relations that existed between different statements of the lecture. The other sister replied: "Why, can't you see it is the Epoch that does it?" That conversation provides a fair illustration of much thinking that considers itself enlightened and even scientific. Life really does offer alternatives of moral action, as we all know.

Further, there is the modern attempt of psychology to erect itself into a science, which it can never do, because, by scientific methods alone it cannot get beyond the bounds of neurophysiology. Yet it is seldom content to stay there. When it passes beyond these bounds it becomes a pseudo-science grounded in a fragmentary and hearsay mechanistic philosophy which it is incapable of submitting to critical examination. This incapacity arises from the fact that it considers all its findings to be scientific and therefore not to be

questioned. These strictures apply, of course, to that unnatural but popular child of psychology, behaviorism. The physiological portion of the field of psychology is amenable to the scientific method, but the strictly psychological part of the field which lies within the contingencies of human action do not yield to such rigorous treatment and can only be pointed to as "probabilities."

Still another cause for the denial of freedom exists in the suggestion, which however unwelcome, undoubtedly has an important bearing. This is to be found in the welcome release from the sense of spiritual and moral obligation which seems to be thus offered the morally lazy, selfish, and avaricious. Moral integrity and the way of righteousness demand effort and self-sacrifice which many wish to escape. Righteousness cannot be achieved but at the price of effort, and inertia is dear to many souls. It is ever within the province of the lovers of evil to deny the fact of moral freedom, but it cannot be held to be an unprejudiced opinion.

What Is Will?

There is no intention to introduce here the forgotten ghosts of the ancient faculty psychology. Will is here to be considered not as a faculty but as an act. When we think of it as a "faculty" we are led into positing it as something that exists independently and apart from its exercise. The case is similar to that of the atom which is now defined by physics as an "event," but we keep on thinking of the atom as something which persists through the event. So will is the act of a self-reflecting person that has no existence apart from its activity. The same illusion attends other phases of thought. Thought as the act of a thinking subject is overlooked, and soon we can imagine thoughts as standing in their own right, ideas waiting around for each other, until we begin to wonder how one small head can carry so many. Thus we are invested with a lot of picture-thinking that has no more relation to fact than Aladdin's lamp bears to the achievements of electrical science. In this way great sections of philosophical and psychological effort have been given over to the pursuit of the fables of the imagination. A similar disaster attends those considerations of the will which overlook the main fact that will, like thought, consists only in its exercise.

Willing is the particular and unique act of personality. It reaches its highest and truest actuality when realized not only through the capacity for self-consciousness, but through the further capacity for reflection upon one's state of consciousness. Here at last it achieves a true state of freedom. There are degrees of approach to this complete type of willing. Even where the animal chooses between paths

there must be some partial exercise of willing. Though it is claimed that he follows only the strongest impulse, yet the strongest natural or functional impulse does not seem always to dominate the animal. The dog faces the storm rather than lie by the cozy fire, perhaps because of the urge of training that has become habitual, though there is no fear of the whip or the disapproval of the master. At times he does acts of this kind having never been taught them, out of some unreasoning loyalty to his master's safety. This habitual type of choice is what we call faithfulness in the dog. It is of lowly degree to be sure, yet one could scarcely say there is no contingency or freedom in it. However near it may approach human willing, there is nevertheless a difference. In the animal there can be little reflection on the motives of choice, in the man, reflection is the chief characteristic of his momentous decisions. With man it is not the blind following of impulses unless he wills it so, by ignoring all warnings of the inner consciousness, nor is it made by the weighing of impulses to determine the direction of the strongest. In man it is a choice made in the light of conscious motives, ends to be gained, and it is often made in direct opposition to the most urgent of natural impulses. Its exercise under these conditions of reflection gives to willing on the part of man, the nature of moral decision, and endows him with a sense of moral responsibility. The absence of moral sense, of social understanding, and of language seems a potent reason for denying the existence in animals of the capacity for reflection upon the states of consciousness. The possibility of reflective selection becomes the basis of language, of social and political institutions, and the academic denial of it is nothing less than moral and social nihilism. The act of choice is easily discernible, but when we look about for the actor, we are searching for something that is known only in the activity. Choices are influenced in many ways, natural impulses, education, social approval, disease or health, prejudice or habit, a thousand of them may help to determine the decision, but the decision itself is the act of the person, made either consciously or by less conscious and earlier choices which have indicated the trail of action. Hunting for the will is like hunting for the person, we know him only by what he does. His acts determine him, and he determines his acts.

What Is Freedom?

Perhaps we should not pursue this line of inquiry further without attempting some definition of the term "freedom." There is a very true sense in which freedom is like time's arrow, it flies in a single direction. Freedom in the highest sense must be considered to be

freedom to do right, to fulfil the normal functions of the organism, and in man this means that freedom can be fully realized only as he fulfils the higher demands of the human spirit and consciousness. Someone is sure to ask, "But are we not free to do wrong?" Let us call attention to the ways in which choices in that direction are handicapped, and end in a greater and greater narrowing of choices. The largest freedom comes through the full exercise of powers, and the full exercise of powers depends upon normal functioning. One may choose the way of falsehood, equivocation, or even of crime, but the field of his operations becomes less and less with exercise. The very stars in their courses begin to fight against him. The disapprovals of society begin to close around him, his falsehoods are no longer believed, and so fall short of their object, but more than all else his own personality betrays him, giving him over to delusion both respecting himself and other men. He no longer sees the world as it is but only through the fogs of his own perverted mind until he is no longer capable of making uninfluenced choice. His background becomes progressively more corrupt and dominating. Betraying others he finds that he has most of all betrayed himself, and his capacity for evil becomes steadily less and less satisfying. He travels a one-way street and the end is sure. The tragedy of our time is that this great fact of life is so little believed.

On the contrary, right choices in the direction of the normal functioning of life lead to a continuously expanding capacity for freedom. Power is added to power for choice in a way analogous to the strength which the athlete puts on in the physical realm by scientific and well-regulated exercise. Only the service of one's highest capacities brings freedom, all the rest leads to an ever-deepening slavery to desires one recognizes as unworthy, and to which he yields, while he deplores it and despises himself.

The Will, the Act, and the Person

In its ultimate nature, willing appears to be a realization of the relation that may exist between objectivity and subjectivity, the medium by which the person acts on the world outside himself. Even the movements of the body depend largely upon the will and become the means of expression of desire. Through physical movements the inner consciousness finds objective expression. Stated in terms so bald as this, willing would appear to be identical with personality itself, but it is the determination of how that subjective self shall express itself. By the act of willing, the person establishes relations with the world not himself and, though these relations

are not altogether made by him, and what he can do is restricted in scope, yet he has a part in determining what those relations shall be. It is he who decides how his thoughts, dreams, impulses, and desires shall seek objective expression. The manner is influenced but not determined by other wills, physical impulses, heredity, and environment. In the final analysis willing is the act of a person finding creative expression for himself. When that expression ranges along the higher planes of moral and intellectual achievement, we have the expression of creative personality.

The way has already been prepared for consideration of the exercise of the will in its highest and freest ranges. The act of moral willing marks the highest point, privilege, and essence of personality. In the truest sense a person is a creator of moral value. Moral willing is the supreme act of life. Will has not been applied, in the highest sense, until it has reached the plane of moral choosing. The choice by which moral decisions are evaded is a deliberate degeneration of personal capacity, a closing of the prison house about the individual. It is of the nature of moral choices to show effects and persistence not found elsewhere in equal degree. Decisions respecting the physical welfare pass away and are forgotten, but moral choices are the self-realizing acts of the soul, inseparable from the person, part and parcel of it, influencing all future decisions, determining the direction of the creative imagination, blighting or blessing, as the case may be, the fountain sources of life itself. Decisions of the moral order have about them the atmosphere of eternity.

It may be presumed that personality begins with the first conscious act of the infant by which he makes himself in some sense master of his little world, but as yet this is but the personality of the self-conscious animal. He begins his differentiation from the beasts by his first moral choice. We may say, of course, that he has always been more than the animal by reason of the potentialities embodied in the human body, but the birth of the soul comes with the first conscious exercise of the moral will. In the beginning of this higher order of life is the act of the self-conscious person, and the fulfilment of his personality, as well as his achievement of freedom, depends upon his growth into the full stature of moral and spiritual manhood. As Chestov has written in a memorable passage:[1] The question of freedom of will is always connected with the basic question of being, and reflection upon it cannot leave untouched the primary source of life.

[1] *If Job's Balances*, Dent, London, 1932. pp. 196-198.

CHAPTER XII

Creative Imagery

OUT OF THE POWER to reflect on his own conscious moods comes the creative imagination which is the unique gift of personality. The importance to the human animal, of simulation, or play, as in the case of the beast, is well known. In his play, the child prepares for the activities and situations that will later take a part in his workaday world. In war it is found that the training of the football field is of high importance, and the utmost realism has been resorted to in the training of troops. Every conceivable situation is simulated in order that men may by habit learn to do instinctively the things necessary to success and self-preservation. The preparation for the work of peaceful life needs similar care in its attention to the imaginative powers of the person. By means of play the youth imagines himself in future situations and prepares mind and body to meet the crisis when it occurs. The lawyer, the doctor, the minister, the artist, the entertainer, the farmer, the mechanic is ordinarily given the bent of his life long before the years of serious activity. When the church is the dominant interest, and most mothers' dream of honorable service in the work of the ministry, a large number of youths will have been so moved by the injected dream that they will seek the ministry as a profession. When the life of the home is dominated by the importance of business success, the dreams of children will center there and we shall have many entering business life. Evidences accumulate that early surroundings that suggest artistic, musical, or literary tastes are of more moment in determining the career of the child than physical heredity. Without a strongly stimulated creative imagination, original work is impossible. This is the reason that leisure is so necessary to the artist or the writer. There must be time for imaginative self-development. The close relation between the creative imagination and the subconscious is now well established. Involuntary movements, which have to be laid down in the beginning by acts of will, must be settled into habits that become instinctive. To the subconscious, or what we might better call the marginally conscious, we turn over many routine activities. Not only so, but many mental operations can be committed to the same

realm. When such activities no longer require strained attention we begin to work without fatigue, so that a knowledge of how to turn over our work to the subconscious becomes important in creative effort. And the gateway to this source of power is through control of the creative imagination. All of us have had experience of the continuous and lightning-like rapidity of the mind. Only occasionally is our conscious attention drawn to the fact that the picturing faculties are constantly being exercised in reverie, the dreams of sleep, and even at intervals in mental effort which is headed in other directions. Concentration is simply the power to command this imaginative capacity in the interest of the main drive. Pictures drawn by the creative imagination have a tendency to usurp a place and gain an expression in the conscious life. We shall not be able to command our full powers in definite ways therefore unless these marginal dreams can be brought to the service of our more conscious drives. If the imagination is working in one direction, while we are trying to move by external acts in the opposite quarter, there will not only be serious conflict, but the imagination will most likely win. Pictures set up in the imagination have a way of sidling into the more external activities. The man who learns to control these inner activities in the direction of his external effort will find his dreams coming strangely true. Sometimes the fulfilment will have been so unconsciously prepared that its occurrence will seem all but unaccountable.

In order to utilize the creative imagination, it must be directed into avenues of activity, and must not drop to the level of mere daydreaming. The creative imagination, unenforced by action, can easily become the foe of accomplishment. Constantly indulged it leads to loss of self-control and degeneration of faculties. The would-be poet or artist who dreams of writing or sketching but never lays pen or pencil to paper, waiting for the great inspiration, will never arrive. The effort to write forms outlets of interest, and creates new ones—the mastery of habits of expression—all these prepare for the great moment of self-realization. At first the individual has a laborious task to perform, calling for much exercise of the will. He must commit the techniques of the desired profession to the plane of unconscious action. He must clear from his path the obstructions to free effort. He must learn, by attempting, how to master his material and himself. Creative achievement will be distinguished from non-creative, originality from imitation, by freeing itself from the merely mechanical operation and passing into the stage of the emotional and imaginative. One cannot become

a creative musician, for instance, without a mastery of technique. This means that the mechanical and the physical—fingers, arms, and keyboard, voice-placing, breathing, or standing—have been by practice put into the region of habit, the instinctive acts of the subconscious. So long as the instrumentalist is conscious of the instrument, the vocalist of his breathing, the painter of his brush, the versifier of his vocabulary, there are obstructions to truly creative work. Robert Louis Stevenson, master of English style, is said always to have carried a notebook with him so that when he saw something worth describing he might sit down on the nearest rock or wall and write a description. He afterward went over this to improve the choice of language. In this way he provided himself with an unconscious style that came readily at the moment he needed it. Unless the mechanical side is mastered to the point of instinctive habit there is no chance for originality of work. On the other hand creative effort can never be labored, though the paths over which it must move can be laid down only by the most exacting toil. Much of educational theory, at least that which frequently moves the lay mind, overlooks this most important fact. Men rule for short-cut education and do not understand that it is frequently necessary to take the long way around. The school does not and cannot make the genius, he must mature for a long time before he becomes prime for consumption. He must lay down by diligent toil the ways which may later be utilized for creative and original effort. This is not likely to follow immediately upon the reception of a diploma. Frequently work must be indulged which will seem wide of the mark. The greatest artist will be the one who can draw from the widest and deepest sources. History, language, the cultural treasures of civilization, philosophy, mathematics, the sciences, all are needed as background. To put all the training upon the vocal cords and none upon the mind or soul is, in spite of any early success, to bar the way of the vocalist to enduring progress, and to neglect those elements which have power to move profoundly the minds of men. In spite of the mock passion of the crooner, too many are easily recognized as singing only from the teeth out. Neither can teaching genius be created by a knowledge of pedagogy, but must be lacking under the most scientific methods, without the teaching instinct and a background of cultural knowledge and consuming love for the task. Technique of rhyming alone may produce limericks but it cannot produce poets. Neither can poems be gathered out of the rhyme book. Technique should properly be interpreted as including not only the more obvious tools of the artist, but

his own power of mental, physical, and moral self-control as well. To this end his training can never be too inclusive. Ignorance of these facts makes it difficult to persuade the young to aim at making a life as well as at making a living, and we have reached the pass where an occasional teacher advises the short cut to a fatal and ofttimes calamitous success.

The imaginative powers are continually in action, asleep or awake. The problem is to learn how to turn them to definite use toward determined ends. The imagination is continually playing upon whatever desires interest us and we will either direct it, or it will control us. Here lies the real difference between the truly educated and the uneducated man. The truly educated man has learned to command his imagination, both mentally and morally, and to drive it in the direction of accomplishment. The uneducated man may or may not be a college graduate, but his distinguishing characteristic is that he is controlled by his imagination, and thus becomes the victim of his emotions, his half-learning, his prejudices, or his momentary desires. It is possible to have the great power of the picture-life within the soul turned in aid of the main drive of life, to have it active in sleeping as well as in waking moments, to have access to its resources so that at the moment of waking one can profit by solutions worked out during the hours of unconsciousness. This drive or push of the subconscious, the utilization of the sleeping hours, is possible only through the control of the creative imagination. If there is complete unity within the self, mental, moral, and spiritual, so that one is free from fears, inhibitions, and conflicts, so that situations are grasped through the "single eye" of pure motives, then great achievement becomes possible. How completely this involves the whole man, psychical and religious as well as physical, is immediately apparent. All the forces of life, external and internal, must be turned in a single direction if the highest success is to be achieved. The question then arises as to how we may avoid conflicts between inner and outer, the imaginative and the conscious. Only a brief answer may be returned at this point, which is, that reflection is one of the main elements in securing the unity of the inner with the outer self. Keeping on good terms with all men of good will, so that to the degree compatible with righteousness and integrity we are at peace with all men, is one means. Greatest of all is to be at peace with our own minds and consciences, a unity with God, which may be realized through genuine religion, faith, and prayer.

The creative imagination if pursued and directed may become

overpowering to the will as generally interpreted. In this connection it is useful to recall the illustration of Emile Coué. One has no difficulty walking a narrow plank raised two inches from the floor. If, however, the same plank were to span a chasm a thousand feet deep, the influence of the imagination would in many cases become overpowering to the will of the person attempting to walk it. He would be quite likely to fall as the result of visualizing the act of falling, in much the same way that the beginner at bicycle-riding bangs directly into the tree he wishes to escape, or the frightened automobilist hits the obstruction he wished to avoid. Visualizing an objective is the first step toward its achievement. This fact has a very practical bearing on life. The man who thinks he can live a double life and not have it affect his business or his art, deceives himself. Disloyalty in his social life, in his heart life, in his emotional life, disloyalty to those over him, introduces inner conflicts which bring inevitable deterioration and keep him back from the fullest success. In the long run the external and the internal life must be in harmony or the secret one will become the master of the other. Full many a life is ruined in its possibilities by doing one job or one type of work while dreaming of doing another. It is better to get into the work in which one will be happy, or of which one dreams, at the earliest possible moment. We live our external lives of conventional manners and habits, and sometimes a very different one in our deep-seated desires. The inner desires are nursed in the creative imagination until the time of unusual opportunity, crisis, or temptation, and then sweep all in destruction before them, or rise to achievement.

Where then shall we begin to exercise the will? The answer is in the control of the imaginative faculty. One can by willing dismiss the early suggestion. To objectify action is in some degree to consent to it and to set in motion means to its accomplishment. The reason the Master of men placed wrongdoing in the inner sources of the imagination was because this is where murder, lust, and evil begin. Unless we exercise our wills at this point, all is lost. The will and the imagination are mutually stimulative and the sinner soon finds himself borne on the tide of action which he seems unable to stem because his will has already spoken in lending place to the evil imagination. The imagination is easily diverted or controlled in the beginning. Allowed to grow, it gathers with it the subconscious forces of life in the direction of good or of evil, as the case may be. "Out of the heart are the issues of life" is a proverb deep in the reality of psychology.

The place and power of suggestion in creative effort are thus clearly shown. Nearly all individuals need the encouragement that parents and teachers should give to raise in their minds adequate dreams, and to give them faith in their ability to achieve. The disclosure by parent or teacher of latent powers often comes to the individual as a revelation and turns the whole course of life, by visualizing successful courses of action. The greatest value of the teacher to the community lies not in his mastery of pedagogical method, or in the marks the schools have set upon him, so much as in the possession of moral and spiritual character, and his humanness which gives him sympathetic contacts with his pupils. By the power of suggestion he discovers students to themselves, and sends them out to the careers for which they are best fitted. To this end there is need that he himself should be the possessor of the highest spiritual qualities. Without these he will recruit the ranks of a low and dead vocationalism without insight or inspiration. No task in the community is more important than this discovery of possible genius to itself, and genius is not so rare a possibility as it sometimes seems. It is the product of interest and direction, of aroused imagination, concentration and effort.

The reason that much faithful work in the world does not reach the plane of genius and originality is because the person has not achieved harmony within himself. He has not learned to tie up his dreaming with his doing. His work lacks that spontaneity, freshness, and spirit which launch into new channels because he does not properly profit by his hidden and all but exhaustless resources. The output of life may be likened to that of a factory. The factory that runs three shifts a day will put out three times the product of a one-shift establishment. The man who sets his subconscious mind working toward a directed end, will not only increase his output but will also improve the quality of it. It is the fatigueless effort of the subconscious mind and an integrated personality, that is the source of enthusiasm and yields the fruitage of genius.

The creative imagination will be found in closest alliance with mysticism in religion and in art, in the unlocking of unsuspected powers. The emotional life of the person is bound up with the imaginative. No emotion, no imagination might very well be considered a truism to be completed by "no emotion, no imagination, no creative achievement." Here lies the psychological reason for religion. Religion is the surest means of bringing harmony in emotion, imagination, subconscious willing, self-direction, and

effort, while lack of harmony here will discolor and confine the springs of creative action. Here also is the reason for worship in religion. The object of worship as well as of prayer is the achievement of harmony within one's self, harmony with one's neighbors, harmony with God, with the universe, with one's own highest aspirations. However such a program is achieved it cannot be less than religious. Such harmony is not only necessary to the saint, it is the need also of the artist, the writer, the statesman, the inventor, the scholar, and is a requisite of all creative work. This work finds its highest expression only through the spiritual motive. A profound reverence for beauty as truth, as human and intelligent, amounting to worship, must have moved the soul of the sculptor of the Venus di Milo. It is a work impossible to the cheap and irreverent soul. This element of worship lay within the achievement of Gothic architecture, transforming the results of uncouth men into beautiful and original artistry. Art is not truly art until it gathers within itself the central core of awe, reverence, and worship. Great literature and great lives spring likewise from similar sources. And the heart of reverential feeling is expressed in prayer. It tunes the creative imagination to the most exalted note, and may be called the *sine qua non* of creative effort. By prayer is not meant a begging for selfish benefits but for power of highest expression. Prayer as an exhibition of pious mendicacy is of no benefit to the world. Achievement in prayer unifies dreams and desires, moral and spiritual aspirations, the whole man, in the direction of a great and ennobling aim. Whether the result be a Rembrandt, a Beethoven, a Rheims cathedral, or a Calvary, it is inspired, and its worth for the advancement of civilization, its value as creative deed, is to be measured by the completeness of its religious devotion. The sordid and uninteresting life is often lifted into power and attainment by the shock of religious experience of the genuine sort. This will continue to be the case so long as the creative imagination has so important a place in creative work.

CHAPTER XIII

Out of the World, Into It

HELEN WADDELL, in a fascinating novel, *Peter Abelard*,[1] describes how Abelard, driven from the schools of Paris, fled to the fields and was followed by thousands of students who set up booths and lived in dugouts, thus founding the tradition of the modern university. She puts into the mouth of the faithful Gilles who reports the situation to Heloise, these words: "He flung the world away, and behold he draws all men after him." The idea and the experience thus expressed are as old as human history, and represents one of the primary laws of life. Few of the world's great leaders have been able to forego the need of casting off an old world before they could achieve a new. Millenniums ago, in the *Tao Te Ching* it was written:

> The heavens continue and the earth endures;
> And that in them which makes them so permanent
> Is that they do not live for themselves.
> Thus it is that they can live so long.
>
> This is why a sage puts himself second, and then
> (finds) himself in the forefront;
> Puts himself outside (of things and events) and
> survives in them.
> Surely it is because he has no personal desires,
> that he is able to fulfil his desires.[2]

These two instances illustrate clearly the road that must be taken not only to the achievement of success but to the possession of personality itself. It is only as the person "flings himself away" on some great task that he can become most truly a person and find his surest and highest expression. This suggestion will be seen to be in line with those of the previous chapter on how to hook up dreams to achievement. It also gives us a somewhat different angle from which to consider the meaning of being a person.

Personality a Matter of Degree

To describe personality in the simplest and fewest terms, we might say that it is the power of self-consciousness and self-direc-

[1]Henry Holt and Company, N. Y.

[2]Tr. by E. R. Hughes in *Chinese Philosophy in Classical Times*, Everyman's Library, E. P. Dutton & Co., N. Y., p. 147.

tion, and the person is the center of self-consciousness and self-direction. If we speak of human personality, self-consciousness includes the further element of consciousness of conscious states, the power of reflection upon thoughts. We might think of mere self-consciousness as the lowest degree of personality while that of self-realization in the upper bracket would be the highest. In the lower degree the animals approach very close to, if indeed they do not enjoy, a lower type of personality. They are conscious of themselves as over against a world of relations. They exhibit a certain degree of choice, and even of self-determination, within narrow limits. They lack, however, that higher power of conscious self-reflection, the capacity for judging between conflicting ideas and impulses which provides man with a sense of moral responsibility, enables him to invent language for the comparison of ideas, to establish social institutions, and construct tools and machines. Man can live along the lower line of animal needs, but cannot thereby come in the strictest sense to be a person. He is apt to continue close to the lower type of personality where conditions of life are so easy that he has practically no labor to perform in order to exist, or on the other hand, where the conditions are so difficult that leisure is unknown, and subsistence so scarce that he lives in a state of constant undernourishment. When he finds these conditions thrust upon him it is possible for him to drop back from a considerable tribal achievement to a state of savagery. That there is no surety of indefinite progress upward, is apparent from the conditions of the lowest orders of mankind after an evolution as extended as any. Not only is there personality of this low type, which fails to realize its possibilities, but there are varying degrees of personality up to the highest.

In its higher sense, to be a person is to turn life in the highest direction with effectiveness and in full consciousness of the loftiest motives. This last phrase must be included because the most complete self-consciousness is attended by an appreciation of the meaning of life, a sense of moral obligations and duties, a clarifying of motives, a sense of social responsibility, and an appreciation of spiritual values. Personality of this sort implies moral self-control, the inhibition of low aims, and the turning of impulses to waste life on the trivial into incentives for forwarding the higher ideals. Highest personality is completest self-control in the interest of the highest aims. Such a definition of the person may not satisfy some, for the term is very commonly misused. Personality does not mean mere individuality. The two terms are not synonymous. Indi-

vidualism emphasizes differences, the bizarre, the unusual, the egoistic. It is sometimes assumed that personality is shown in a supreme kind of selfishness or disregard for others, by running counter to the general good in the interests of one's own pleasure or profit. This is the ideal set forth in Nietzsche's superman, but it was essentially false because untrue to man's spiritual nature, the one possession which distinguishes him from the beasts. The climax of Nietzsche's ideal of the person was the "blond beast" which he describes with so much enthusiasm without realizing the contradiction lurking in such a description of a "superman." The blond beast was a superbeast perhaps, never a superman. The fulness of personality is not come by until the person has made himself captive to the supreme good. When the individual has reached the point of self-control where neither selfish comfort nor private interest are allowed to hold him back from spending life where it can accomplish the most for human benefit, then he has in the true sense of the word become a person. The full personality is realized only through the complete consecration of powers to society, to righteousness, and to God. The reason is not far to seek. Personality is not compartmental. It is made possible by capacity for self-reflection, and self-reflection makes heavy demands. Any lowering of aims from the best conceived, cripples and disintegrates personality. The person is conscious of shortcoming, and being conscious, knows he has betrayed himself. The sense of inferiority thus aroused, he cannot escape, and it enters disastrously into all of his outlooks and actions.

At one point this definition of the person runs counter to much popular theorizing, and this with respect to freedom. If men are not free, personality, in the sense we have been considering, is impossible. It is popular teaching in psychology to maintain that a person cannot master his impulses. That if he attempts this his impulses wreak terrible consequences on his mental and psychical life through inhibitions. This may be quite true, but only under one condition, which is seldom sufficiently considered. That one condition is that the individual has not achieved spiritual unity within himself. His conflict arises out of his hostility and determination not to obey the "ought." His disobedience to the heavenly vision outrages his deeper character as a person, and unhorses him as the master of his own life. The conflict could not have arisen had he been wholly committed to the good. The fact of conflict, of these inhibitions, upsets, however, the main tenet of materialistic psychology, for conflict could not arise if there were no freedom. Inhibi-

tions and conflicts arise out of the possibility of choice between courses of conduct. Personality is therefore an exercise of freedom. It implies ability to take the higher course in spite of social entanglements, the prejudices of men, custom, environment, and heredity. This assumption accords with common sense and common experience. The thief may charge his propensity to an "uncontrollable" impulse, inherited from his grandmother, or to having gone to Sunday school against his will, but the situation seems different to the man whose pocketbook is stolen. He is not satisfied even when the doctor is called in to pronounce it a case of kleptomania. Of course, if the man was not responsible, he is either insane, and punishment will not better him, or stealing is of the fundamental order of things, and one should expect nothing else. However, this popular interpretation of psychology will find many disbelievers. Our political and social institutions will continue to be of very necessity based upon the presumption of freedom. Without this presumption civilization would perish. What is written so deeply into social necessity and common understanding we have no hesitancy in believing to be a fact.

Selective Self-giving

The possession of the highest personality is incompatible with the practice of selfishness, yet this must not be interpreted in an easy or spineless way. The unselfishness demanded of the person does not consist of the foregoing of everything one may desire, or the weak yielding to every wish of other people. The demand for unselfishness in others must show cause. Like the love of a true parent it must not be allowed to run into indulgence. Self-sacrifice is not good in and for itself alone. It is justified only by a good and sufficient reason. Weak people often demand sacrifices in their behalf which should be denied. The person must be unselfish, but unselfishness is a game two can play, and unselfishness is demanded equally from those who receive. Personality must possess the power of self-assertion when that is necessary to the larger good. When the larger good is problematic we must use our best judgment. If society is to advance, there must be within it a certain Puritanism to save it from moral flabbiness. Too many people associate goodness with spinelessness.

The virtue of unselfishness in the person lies in the privileged achievement of internal unity and of detachment. Only powers that are exercised disinterestedly or unselfishly can be exercised to the full, though this is a fact to which the common run of men are

willingly blind. So long as private interest is allowed to strive with duty there is only halfhearted achievement. It is only in freedom from fear that the person can utter what truth is in him by voice, pen, or act, and it seems incalculably difficult for any human being to do this without there being a genuine faith in God. Not that this belief should of necessity take on the familiar theological form, though the experience of the ages has shown its importance. The assurance of God may be in the form of a sense of the everlasting fitness of things, the agreement of one's truth of word, idea, or act, with values that are eternal and that cannot pass away. To stake our all upon some such ultimate expression, to risk all for it, to live and, if necessary, to die for it, is to express an assurance of faith, a belief in God, of far greater meaning and importance than the repetition of lip phrases. The person never fully realizes himself, nor does he come to truest self-expression until he is thus freed from himself, and from every unworthy wish. All truly great creative work must be done in this sense of freedom and with this assurance of God. On an occasion of the long ago a man found it desirable in the line of duty to transfer from familiar scenes by which he seemed to be fairly moving away from opportunity, and burying himself from the world. Years afterward a discriminating friend to whom the original move had seemed something like suicidal to all hopes of success exclaimed: "Why! You moved out of the world into it." The path which calls for fortitude is often the path of privilege and self-realization, and might be always so. Albert Schweitzer moved into the depth of the African jungle and, doing so, moved into a wider world.

CHAPTER XIV

Are We Souls?

"Do YOU believe that human beings have souls?" is a question recently asked us. Whether the object of the questioner was to test our orthodoxy, to confirm his faith, or to establish his suspicions of heresy was not made clear. Of this much we may be sure: If he was a disbeliever in souls, he was seeking confirmation where it could not be found, and, if a believer, he misunderstood the nature of the soul.

Men have sought for years to prove or disprove the existence of the soul by mechanical, material, or substantial evidences and ineffectively. Bodies of dying persons have been put on the scales so that loss of weight with the expiring breath might indicate the avoirdupois of the soul. Unimaginative people have attempted to photograph the departing spirit, and thus to prove the reality of souls. The means which have looked on such proofs as lie in a detectable substantiality have come short because they have failed to realize the meaning of the soul and the place of its demonstration. The futility of such considerations appears if we but change the form of the question. The question should be not: *Have* we souls? but: *Are* we souls? The change of inquiry moves the problem out of the realm of matter and substance into the realm of activity, being, and reality. This latter region is by far more important in matters affecting our happiness, success, satisfaction, and the production of values. To look to the mechanical proof of the soul would be like using the butcher's scales to compute the love of wife or child, or to determine how much weight they had lost in the verbal expression of their love. It would be futile to advance with a yardstick to measure the honesty of our neighbor, or describe in terms of oscillation or vibration the loyalty of our friends, and equally useless to try to weigh their souls, or catch the fleeting *aura* of a spirit in the camera. Such attempts display both credulity and ignorance of the nature of the soul. They indicate belief in matter but disbelief of spirit.

If it is asked how, if one cannot by the use of the surgeon's scalpel discover a soul lurking in some corner of the brain, he can be sure that he either *has* or *is* a soul, the answer must be that he knows it as he knows any other phenomenon of reality, by its activity. It is as Hocking has said, the self getting its bearings in the world. The soul

is that which makes moral choices and its presence is known through its activity. This is the same principle by which we become aware of other persons and come to believe in their reality. We do not doubt the reality, rationality, or activity of Beethoven because no one could locate in his cadaver the secret remnants of the Ninth Symphony. Psychologists would have looked in vain through the physical organism of Bach to discover the track of some elusive fugue. Though this is so, we do not doubt the reality or being of Beethoven or Bach, or the meaning of their music. We do not deny the reality of their harmonies because we cannot pluck them out of the air, or because some deaf person refuses to believe what he cannot hear. It is indeed impossible to submit our most important realities or values to such rule-o'-thumb measurements as are demanded of the soul by those who cannot discover souls though they are met in broad daylight. Neither daylight nor darkness nor cabinets are the special environments in which souls choose to manifest themselves.

The Soul as Moral Agent

The existence of the soul is evidenced by its activities in its choice of goodness, its adherence to truth, its love of beauty, its loyalties to righteousness, its sacrifice of things material for the sake of values that are immaterial. He would make a damning confession who would admit that he is not a soul. The manifestation of love, of self-sacrifice, of honesty, of integrity and loyalty, righteousness and justice, these are the works of the soul, the evidences of its activity and existence. One cannot reasonably deny the soul unless he is ready to repudiate the reality of these values. No better evidence nor more fully accorded demonstration is possible in the whole realm of nature. It is even less elusive than the existence of the atom itself to which we today accord such substantiality. In the case of the soul we have direct experience, indubitable knowledge such as is not afforded us anywhere else in nature, for we are directly conscious of our moral activities.

Self-consciousness rises to its highest realization in the soul. We have seen how capacity for self-reflection grounds the moral and social qualities and distinguishes man from the brute. This capacity is capacity for soul life. The soul, like the person or the will, may not rightly be considered as existing apart from its activity. Moral choices are the activities of the soul, and through them it realizes itself. Misunderstanding has arisen from the attempt to visualize the soul as something existing independent of its activity, in much

the same way as we have come to speak of ideas as if they could exist anywhere without being thought. Just as personality must be grasped by a sort of realism, assumed as a self-conscious entity, immediately experienced by us, so the soul carries its unity and persistence within itself. It is as useless then to discuss whether we *have* souls, as it would be to raise the question of our existence, for if there is moral activity, the choosing of right from wrong, that unit which thus morally realizes itself is a living soul. There is no need further to substantiate it. "Soul" and "person" are practically synonymous terms, yet the term "soul" may be reserved for those spiritual activities in which the person finds his completest self-existence.

When Does the Soul Begin?

If the soul cannot be said to exist apart from moral action, what conclusions must follow? When, for instance, does the soul begin? It may potentially arise when first it becomes a living organism, but as a soul it must begin with the dawning of the moral self-consciousness. Moral self-consciousness begins with the first sense of oughtness, or of ought not, and this may be earlier than we realize. We are aware of the phalanx of theological disputations that have arisen into being at this point but we do not intend to discuss them. Is the soul transmitted through inheritance? There is reason to believe that only the physical field of its activity, the body or *soma*, as the biologists say, can be inherited. The nature of goodness, through which the soul manifests its existence, demands free and concrete moral choice in a self-conscious person. Can the soul then be said to be self-created? Yes and no. No, in the sense that it could not exist except through the creative act of a Cosmic Intelligence which provides the ground of its relations and the field of its manifestation. Yes, in the sense that the moral choices through which it realizes itself are its own. Though the individual soul may be said to have existed from the foundation of the world in a Supreme Will which was providing for its activity in time, there is a narrower sense in which it may be said truly and concretely to exist only with the beginning of conscious moral decisions. When moral decisions are actually being made, right or wrong, by normal functioning or by perversion of function, we have the living soul.

Souls Saved or Lost?

Having considered the question of the reality of the soul, we can make further progress perhaps, by asking the question how it can

be saved or lost? Can it be by mere mental beliefs or assents? To the direct query, the common consent of Christendom would be, no! Souls are not saved by intellectual "isms" or beliefs that fail to get into action, or are not embodied in actual living and choosing. For the saving of souls, there is nothing more impotent than intellectual assents that do not get into action. There is a believing with the mind and there is a believing with the life, which is "the power unto salvation." To affirm this is not to say that intellectual beliefs are unimportant, for they may be the forerunners of action. Though they are of importance, they can never substitute for life and being. The final judgment on any man's philosophy or on his theology must rest on its capacity to produce righteousness.

It seems useless to proceed further unless we try to determine what the saving or loss of a soul implies. Salvation is a hackneyed term which has been lightly and loosely used and bandied about the world recklessly. It may mean much or nothing. The original connotation of the word is often forgotten and it is well to call attention to the original meaning at this time. The root word means health, and salvation means being in a state of spiritual health. It is then a term for life. It has no reference to a *status quo* either here or hereafter. It is not a condition that can be let down from above, as some imply, nor yet which can grow up from beneath as is the opinion of others. Above all, it is not a condition of repose or of inactivity. It is living activity. *Saving* a soul is *being* a soul. That is, salvation is taking place in persons when they are functioning spiritually, when they are achieving lives of love, mercy, justice, honesty, integrity, self-sacrifice, altruism, and truth. Such a life is possible only in the atmosphere of spiritual ideals. It is the result of inspired personal effort and surrender to the Highest, the struggle against opposing forces, as surely as the life of the tree is a successful overcoming of the disintegrating elements of water, soil, and sun. The forces of decay are transformed into the growth of the living organism. The human spirit likewise, through the life that is within it, rises superior to the spiritually disintegrating forces that surround it, and finds its salvation in being just, and good, and loving. Salvation then is a process of becoming, and its essence is life.

What then can philosophy have to say about the saving or loss of a soul? To it salvation can mean nothing more nor less than moral self-realization of the person. Saving the soul would mean self-realization of the highest powers of personality through continuously right moral choices and the free pursuit of ideals of righteousness. If this seems to emphasize too much the part of the

person in his own salvation, it must be remembered that the whole ground and inspiration to moral activity is provided by the supreme Creative Person. Yet acts, to be moral, must ever be free, and the inspiration on the part of the Divine is never compulsory. He must have the willing cooperation of the human person. If the self is then to be held responsible for its wrong choices, it must likewise be credited for its choice of the good, and man's part in his own salvation must be recognized.

On the other hand, and under the conditions presented, the loss of the soul would mean, not some arbitrary and capricious power exerted from the outside, but simply the decay of moral powers through disuse or misuse of moral choices. Loss of the soul is not then something that can happen only at the end of the life span but is a process in operation, in one direction or another, from the beginning of moral self-consciousness.

The Persistence of the Soul

Scarcely any fact of human experience is more important in its bearing on life than that of the persistence of the moral self-consciousness. Enduring quality is a marked characteristic of the soul, inability to forget. Examples of abnormal psychology, and particularly of cases of dissociation, seem to indicate that the most serious cases arise out of shock to the moral sensibilities. The more serious "complexes" arise apparently out of moral conflict, a failure to achieve harmony between the moral self-consciousness and the moral will. The soul seems never to forget. Under the stress of tragedy or change, situations long buried in the marginal consciousness and influencing the life through the imagination, spring into vivid consciousness and the soul stands revealed to itself with terrible impartiality. This fact should give the reckless man pause before any effort to hide from himself his own shortcomings. That we are able to turn our attention away from our sins for a time is due to the temporary limitation which attends existence in the temporal and spatial order. Some psychologists assert that the immoral suggestion will immediately arouse the hypnotized subject. This seems to indicate that even under hypnosis, the subject cannot be successfully commanded to do that to which his will has not already consented.

If it is possible thus to consider the soul from the standpoint of philosophy, someone asks why the existence of the soul is so often denied by the presumed experts in "soul," the psychologists. This denial results from the effort of psychology to be a pure science.

But it is not this alone. By deeper study of the meaning of personality, it is possible to distinguish between self-consciousness and soul. The soul is self-consciousness in moral action, a moral value, and as such is not amenable to the scientific method of weight, motion, or mass. There is no way in which a moral act can be scientifically demonstrated, at least as science is prepared at present to define itself. The soul is the moral essence of the person, so important and so regnant that the truest personality cannot be realized apart from its development. Our souls do not wait upon scientific demonstration. We are conscious of them through direct experience, the most intimate and certain of all phenomena, and the basis even of scientific interpretation. However strenuously we try to convince ourselves of the soul's nonexistence, we are never quite disabused of the feeling that it is the most essential part of us. In the moral life we discover a blessed *daemonion* like that of Socrates urging us to nobler endeavor, or at least warning us against unworthy action, a voice upbraiding our moral remissness with a power of punishment quite demonic. We feel intuitively that being a soul is the crowning act of the person.

Soul and Reality

Is the soul, then, a reality? Much, of course, hinges upon our definition of reality. But here personalism receives strong support, at least by analogy, from the latest theories of science. We are now asked to define the atom, not in terms of matter, as lumpishness, weight, or objectivity, but rather as force, as activity, even more, as self-activity. In the person we have direct and immediate knowledge of this same self-activity which science makes a basic principle of the cosmic process. On the same principle the reality of the person or the soul is the most certain of all facts immediately verifiable in human experience. If it be objected that this fills the realm of nature with a sort of hylozoism, in which everything, organic or inorganic, is endowed with life and self-consciousness, it may be replied that there may be degrees of self-consciousness, which reaches high level in human personality, and its highest state in the supreme Creative Self-Consciousness.

Reality is to be seen then as primarily, activity, activity infilled with purpose and intelligence, and for that reason bearing meaning to all intelligences. We live in a universe which is never static, never dull dead matter, but everywhere pulsating with life and activity. To live is to act, to create, and creation is the unique function of persons. Where new things are coming into being, persons are

acting. Personalism looks on the world as primarily, and in essence, an expression of life. It is living, vibrating, active in every part, from the tiniest atom to the noblest star. No particle in it can continue except as it cooperates with the rest. Life and being is itself a correct response to environment, and even in its remotest part there is a power also of abnormal erratic response, which in the lowest range of being is expressed in the so-called Principle of Uncertainty.

To Be Is to Cooperate

For the human soul to exist is then to find its truest and highest correspondence with the life about it. To this end there must be harmony between our physical bodies and the physical world around us if we are to live in the fullest sense, but only such correspondence as shall forward and not dull the higher spiritual sensibilities, the purpose toward which every right-minded soul directs itself. Then, there must be harmony within the soul itself. This is difficult to achieve because it calls for a supreme self-mastery in the interest of the higher, else the conflict operates to defeat life itself. The best is undone if lower impulses are fostered, and the soul is thus diseased and destroyed from within.

Not only must there be this inner harmony. There must be harmonious response to other souls and to the living world outside. To such a person the whole world speaks. Its truths are clamant in the voices of the tides and in the prattle of the children in the dawn; in the fresh crispness of the wind on the upland pasture and in the unresting movement of the city streets; in the fragments of song from the meadowlark, and in the expression of truth in some glorious volume of the inglenook; in the awfulness of dawn over the snow-crowned mountain peak and in the delight of the voices of the nursery; in the silent reaching out of the roots of the plant through the dark soil; and in the struggle of the human soul after self-understanding and light. All these activities are closely related, for to *be* is to cooperate—for the person to fit himself into the whole in a normal way, which is the highest way. Who shall say that in this process man only is sentient? There may be countless grades of sentiency down to the last positron, the whole creation striving after fuller expression, "groaning and travailing in pain together until now, waiting for the revelation of the sons of God."

Eternal Being is Eternal Self-conscious Action

Behind the vastness of this harmony in which we live and move and have our being, is there not the Supreme Person, the self-

creating whole which is God? Not to think so is to deny existence in its highest conceivable form, and to remove at a stroke all chances at explanation of the world. Though against this concept there is the burden of explaining the world of evil, it is impossible to show how moral character could become a fact without the possibility of evil choice. At this price we purchase freedom. There are few, very few, who do not find life good in spite of its disappointments, and there are few evils which man does not himself make by unfairness, injustice, moral and spiritual indifference, arising from unwillingness, to achieve harmony within and without. Evil is the dark shadow of broken hopes and disappointments, infidelities to the universe, to the soul, to life itself. Where it passes beyond this it is indeed inscrutable, and yet we find it yielding, in those who suffer, a character and a glory that puts us to shame. The sight of patient suffering is a rebuke to self-seeking, and may be, to the All-seeing, not too great a price to pay for freedom.

Whoever finds the complete harmony of inner integrity discovers the whole universe fighting on his side. The forces with which he learns to cooperate, cooperate with him. New forces, new powers come to him from without, as new ones spring up to him from within. The universe answers his prayers as he cooperates with it. He reaches climactic powers in self-forgetfulness, and artistic scientific or religious genius breaks into full flower when he forgets personal profit, gains, and fame, in the love of his work. He then becomes a creator, a co-worker with God and in the truest sense a person. As he comes to participate with God, his work takes on the meaning of eternity, for eternal being is itself eternal action.

"*When We Dead Awaken*" were the startling words which Ibsen chose for the title of one of his works, and the phrase carries the thought with which this chapter might well close. The present world is in chaotic state because of general non-cooperation. The universe itself is an organism closely related part to part, and disease in any part is certain to infect the whole. There is cooperation enough from the selfish standpoint, but our present situation bespeaks a moral and spiritual debacle. Injustice to races, classes, or individuals eats like a cancer into the body politic. Righteousness, the realization of souls, must bring the better day. There are inventions yet to be made for the prolongation of life, for the increase of comfort, for the enlargement of knowledge, pictures to proclaim the greatness of human existence such as have never yet been painted, unheard harmonies yet to break in song. These are the untapped resources that shall be ours "when we dead awaken," awaken to the fact that our supreme need is the need of the soul.

CHAPTER XV

Two Plus Two Are Five

IT RATHER DATES A PERSON to make reference to the old-time Arithmetic which cased the infant into mathematics with pictures of two soldiers, bearskin hats, crossbelts, knapsacks, and all, standing beside two others exactly like them with a plus sign between, and these mysteriously transformed into identical quadruplets by the mystic parallel lines, meaning "equal to." There were other pages of apples, horses, dolls, donkeys, and monkeys to further beguile the lagging spirits of the mathematical novitiates. Our credulity might have been imposed upon by such assumptions as: if one man can dig a well in ten days, how long would it take ten men to do it? Reference to the appended answers in the back of the book indicated that however small the well, ten men would not be too crowded to do it in one day, and we were called on to witness the victory of triumphant common sense. This illustrates the ease with which "pure" mathematics, in spite of its usefulness, breaks down in the presence of life and action. Nor are we confined to the region of pure hypothesis, far from practical affairs, for illustration of the claim that two plus two always and eternally equal precisely four. We possess very vivid examples in contemporary affairs. The Nazi regime was competent in mathematics. It computed to the last workman, and the last ounce of aluminum, that ten thousand planes a year were an impossibility for a freedom-loving democracy. The imponderables which could not be gotten into the scientific equation were dismissed as unimportant. But in the critical hours of human history it is the imponderables that surpass all other factors in importance. Adolf will perhaps go down in the record as the greatest two-plus-two man in history though it must be admitted that the spell under which he rested was prevailingly general.

The mathematicians are not the only ones who have had difficulty in applying their principle to life. What fishwife in Billingsgate, or elsewhere, ever "put two and two together" in a tale to find that it equaled exactly four? The story was bound to grow as stories do that have reference to human life and activity. In fact, it is to be questioned whether two-plus-two ever equal exactly four

anywhere outside the story book that provided our elementary lessons in arithmetic. At best it could be only a rough approximation, accurate enough for general purposes, provided the soldiers, the apples, or the marbles were as identical as those in the picture, and not diverse of morale, rotten, or off-center, as they would be in actual practice. We still remember our favorite "nibs" or agate marble, which we prized above all the other hundreds because of its accuracy in making a shot. It seemed a magic spell of "luck" then, which was probably due to the internal balance, but in practical estimation of the marble-player it was worth a hundred others. When we come to sentient beings the gap widens more. Who would trade his favorite horse or dog on the principle that two and two are only four? When it comes to men, for either labor or companionship, the equation becomes meaningless. It might turn out that one good well-digger would be equal to any ten others available, and as for soldiers Mad Anthony Wayne seems to have been worth a whole company of the enemy. These are the considerations that lead us to run amuck of common sense, and boldly post the modest claim that often two plus two equal five.

Life Runs Away with Mathematics

We have no intention here of depreciating the important worth of mathematics, or its value to society. The mathematicians are a conscientious, hard-working, and underpaid class who do the underground grubbing in the darkness of unappreciation, that the rest of the world may solve its problems painlessly by the comptometer, the cash register, and the slide rule. Indeed there seems danger at present that the rising generation will know how to use a slide rule without knowing how to construct one, if all slide rules should be destroyed by some mathematics-hating dictator. What we are quarreling with here is the idea that we can state life in terms of mathematics and have our statement express exactitude. This idea is one that constantly threatens in these piping days of I. Q.'s, biological curves, and statistics. We are likely to know more about percentiles than about what they mean, whether they are applicable, and how they have been obtained. That we have reason to question them Heaven knows, since the mathematicians (German) demonstrated that the Nazis could not lose, and the great Le Conte proved scientifically that a heavier-than-air machine could never fly. Far be it from us to disturb the pleasant dreams of our complacent friends that two-plus-two must always and eternally equal just four, but life itself demands more and sometimes must call for one

to be equal to even sixty or a hundredfold. This other principle of progress is especially demanded in our time when advance is called for, scientific, social, and religious. The present is no time to sit contentedly resting in the smug assumption that it is enough to write four at the end of the equation. If they can never equal at least five, then there can be no advance in knowledge, politics, or religion, and civilization is doomed. Advanced scientists, inventors, social discoverers, and religious innovators have from time immemorial been ridiculed, abused, squelched, burned at the stake, or crucified by the two-plus-two advocates. The first act of Hitler on entering Paris was to ban the philosophers and burn their books. This is precisely the reason why it is important, in the face of general disapproval, to cry aloud and spare not the living truth that today, two plus two must be made to equal five or more. That the "two-plus" dogma should be deemed potent at the present time in the face of its world-wide reversal in practical affairs is one of the curiosities of history. There is almost universal acceptance of the theory of evolution, which wouldn't have a leg to stand on, to say nothing of having two to walk with, were it not for the fact that in living nature two plus two must repeatedly equal more than four if the whole cosmic process is not to end. It would be nice, of course, to have nature stand still long enough to have an authentic permanent photograph of her, so we could arrange ourselves and our opinion of her, which we call our science, for all time, and lie down to a comfortable Rip Van Winklean sleep. It would be comforting to know just what we would be able to put our hands on in the morning, and it is disconcerting to have the world move away from us overnight. On the other hand the world is crowding us with unexpected exigencies, and we have to run to keep up with events. Maybe this inertial fixity which obsesses us, this love of the status quo, is the deterrent which keeps us from recognizing facts as they are, just as some theologians most loudly vociferate their belief in a dogma just as it has become untenable, and prove their faith by burning the martyrs for denying that "falsehoods" may prove more enduring than "truth."

Two Plus Two in the World Order

The demand that Nature sit still for her portrait, is one in which she is quite determined not to accommodate us. A world that may yield exact and infallible results by the plus-two treatment has to be taken in cross section. It demands an Eleatic god or a powerful Moses to command its sea to stand upright. Under such conditions

this would be the best possible world for the static philosophy. Zeno's arrow poises in flight so that we may construct a convenient graph, and Achilles and the tortoise loiter paralyzed, in a point-to-point correspondence. What is wrong with this so complete and mathematical world? Everything! The chief characteristic of such a world is death, not life, while with the real world this is reversed. Point-index systems look well when arranged in graphs, but the universe has no fixed points except that of the observer, or person, who is himself in transit. Thus we have been led to foster a static condition of society, unequipped for the inevitable changes that must come, a society smugly content, from lowest to highest with its statistics, those shadows of reality, and its "things as they are." We build the systems of society, scientific, social, political, and religious, as if life could teach us nothing. Thus by credos, declarations, constitutions we attempt to lay the dead hand upon future progress, trusting in our own omniscient wisdom. We die, grasping the static charters of society, and commanding our offspring to keep them inviolate forever, as if new occasions would not teach new duties. Our present situation is due largely to our unwillingness to apply living and changing concepts to a living and changing world. The increase of material comforts, by which the domicile of many workingmen outvies the castles of Queen Elizabeth in comfort, instantaneous world communication, the conquest of space, the universal interrelation of international economies, these constitute a physical revolution in our living economy. Upon our static theories represented in the two-plus-two doctrines they have put a practical stress and strain for which these are inadequate. The new wine will burst the old wineskins, and the attempt to mend and utilize the old methods and watchwords is like sewing patches of new cloth on rotten and outworn garments. Before the ink of our latest statistics is dry, new conditions confront us for which we are unprepared because we possess only the cut-and-dried wisdom of the backward look, and little of that insight into the future, which comes to eyes morally clean and is the vision of the pure in heart. This higher vision and insight alone can meet the demands of life in a cramped and cabined world where any disease anywhere—physical, moral, or political—stalks on every doorstep, and entrenched wrong anywhere threatens the entire world with revolution. Good will, love, and the open mind, these alone can keep clear the arteries of the living world and provide solutions against the peril of change.

Both Dostoyevsky and Chestov have suggested that there is no

progress in society until in some fashion two plus two begin to equal more than four. But we are set on our maxim and feel, if it cannot always prove true, the world would sink beneath us. Anyone among us who dares to question the dogma may very likely be considered insane or an enemy of society. Yet this truth that the famous union often adds up to five or more is the latent truth in the doctrine of evolution, that foundling child of science which has grown up into a living embarrassment, as it has become the telling argument for theism. This truth is latent in the doctrine of emergence, that swan song of materialism which hopes to cover with a "weasel" word, the fact that in the realm of biology, intrusive novelties not infrequently extort from us the confession that two plus two may sometimes create five. The principle is not a new one and is present in the common experiences of life. Only our blind devotion to a single method of observation could have hidden this significance from us. We rationalize our world into a neat two plus two which is at best a hypothesis, and when some fact arises that does not fit into our scheme, we deny the fact rather than the hypothesis. As one writer recently stated it:

> It is true no doubt, that most of the great generalizations of science, such, for instance, as the law of gravitation, and the first two laws of thermodynamics, are so solidly established that the discovery of any contradictory fact is scarcely conceivable. Any such alleged discovery would suggest only error or illusion on the part of the discoverer.[1]

From this he goes on to affirm the absolute certainty of practically all those assurances which have been exploded in physics in the past few years under the verifications of relativity, the principle of uncertainty, atomic activity, and the rest. This is what comes of sticking to the affirmation that two and two invariably produce four. In spite of the inalienable value the affirmation has in the region of mathematics, its abuse in the kingdom of life has often stood directly in the way of discovery of new truth, and has settled many down to a slumber as deep as that of the dogmatists. Whatever the place of the principle in mathematics, it has only a subordinate place in dealing with a living universe. This is the secret of the resort to non-Euclidean geometry, and the array of new concepts such as quanta, and the contradictory corpuscular-wave theory of light, which try to embrace facts that the mere sum of two and two cannot take into account. These imponderables that enter into the equation now call for our strictest consideration. The imponder-

[1]Hugh Elliot: *Modern Science and Materialism,* Longmans Green and Co., N. Y., p. 8.

ables must be called upon to help in the solution of the present world crisis. By their neglect we are about as unprepared for the peace that must come as we were for the war that preceded it. As our cities have grown into swarming hives, and our thinking has been commercialized, the old amenities between neighbor and neighbor have drifted out, yet these were imponderables that stayed the hand of revolution. The absence of these lost neighborly inclinations may bring the destruction of civilization. Now we organize our charity so as to make it as impersonal as possible, with the double result that on the one hand we have no idea how the half of the world is forced to live, and on the other hand, that intangible self-respect and love are replaced by a species of pauperizing graft, "bread and circuses." We are now entering upon a new world of space-time concepts that foretokens new concepts of society. The old world was made up of two-plus-twos everywhere and there seemed to be no other important truths; quantities were the seeming realities. Now we discover that space, and time, and even quantity, are relative terms for what is at bottom, activity. In such a world, advance must be made through the strictest cooperation between the multitudinous entities that comprise it. Here man stands in the unique position of power to remake his world by the addition of other elements, mathematically inexpressible.

A Lesson in Addition

There is a story from a very old book, which everybody owns but too few read, that tells the outcome of life for the two-plus-two man. He is pictured as being presented with a talent, with orders to report later. To this man a talent was exactly one talent, no more, no less. The opportunity that came with the talent, being imponderable, and not showing in the books, he missed altogether. Under the spur of his exact thinking, since there was a slump in the market, or trading was precarious, not to mention bandits in the neighborhood, the correct proceeding seemed to be to wrap up his talent carefully in a spotless napkin, and bury it in the back yard. Then on his Master's return he would be able to pay in full and no questions asked. No doubt the fact that it would be the very same bright gold coin that had been delivered would form a telling argument in such a mind, "Here thou hast what is thine." There were in the situation facts the Master doubtless would overlook. Among them would be the possibility of inflation which would decrease its value overnight, or it might appreciate, and then whose the increment? The only sure method for its appreciation would have been to put

it into the tide of business—do something with it, if no more than to put it into the savings account at two and one half per cent. If he were too timid, "afraid" was the word used, to venture, he might at least have let others venture for him. How did it turn out with the other servants? The man who had two talents and doubled them eventually found himself in possession of five talents,[2] and in addition is made ruler over five cities, with all perquisites added. The man who doubled his five talents was made the owner of ten talents, and the governor of a province of ten cities, and in addition received the talent of the two-by-two man as a bonus. It seemed to my childish mind as it may have to yours, or as it did to the questioning bystanders of the parable, that there was something of injustice here. Greater abundance was given to the man who had most and from the first servant was taken away "that which he *seemeth* to have." Mature reflection will convince that this is what actually occurs in practice whether we like it or not. If it is the way of life, it may be natural, and if natural it may be found justifiable. What is disclosed to us is a fact inherent in the nature of possessions, for we never really own anything, whatever our title deeds, we never own anything which we do not use. The more we use it, the more we own it. The law of atrophy and decay is one of the swiftest and surest laws of the universe, ruling in plant and animal life as surely as in human life. The law is: use or lose. You cannot use without getting returns of some kind, even if it be no more than bitter experience. Bitter experience may provide the most valuable asset for the future, if we are considering increment of life as well as of property. One can at least open the soul to new experience, for better or worse. The active bad man stands a better chance of later mending his ways than the smug one-talenter, complacent in self-satisfaction, interested in nothing, dead before his time.

These considerations lead also to a further fact; goods, possessions, values, cannot in the strict sense be transferred, but only opportunities. To be able to use his good each man must become a creator, and the value he does not create is of no real worth to him. Along with ownership must come appreciation, and appreciation comes with honest use. The supreme value is always the one that inheres in the person himself, the one which he makes. Though he inherits millions, they become his only on use. What is given him is opportunity, what becomes his is the way in which he builds that opportunity into life and character. Riches may flee, but that which

[2]There is a discrepancy between the accounts of Matt. 25, and Luke 19.

he builds into life no one can take from him, it is permanent and eternal. In the end it comes to this: the something more that we make out of the two plus two is our only genuine possession. If we have nothing at the end but the selfsame talent wrapped in a napkin we are bankrupt. To be sure, this doctrine is far away from the two-plus-two concept that rules the workaday world, which is content to call a spade a spade and a dollar a dollar, without respect to the opportunities offered in terms of actual life and possession.

God Requires Only Impossibles

It begins to be clear that this steadfast faith that two and two must always equal precisely four is inadequate for the demands of life. Adherence to it leads the individual into a wasting of his opportunities as futile as an insane counting of straws, because whatever life is to be had must be a progress, a going beyond what already is. In life there is no standing still. To stand still is to die. Recalling the parable of "The Rich Fool," it will be remembered that the condemnation was not a condemnation of wealth but of its misuse. The prosperous fool decided to tear down his barns and build larger, and to say to his soul: "Take thine ease, for thou hast much goods laid up for many years." But God had the last word, and it was the voice of nature as well, the undeviating law of human life: "Thou fool! This day shall thy soul be required of thee!" He had by a single decision dissipated the supreme value. Unless two added to two can be made to equal more than four, life is nothing. It was the refusal and abrogation of life, the abdication of the soul, the destruction of the person.

Because life demands continued growth for existence, the two-plus-two attitude toward it can never be adequate. Man must attempt the impossible in order to achieve the best possible. Someone has put it succinctly in the phrase: God demands only the impossible. If a man's God asks only what is possible and reasonable, he is not genuine, but only a false and bastard god whose worship is idolatry. Such a concept is far away from the complacencies of the man who feels that two plus two is all that can be required of him. There are too many of us, like Jackie Horner and the Christmas pie, who wish to be congratulated on helping ourselves to the plum.

Another point, in the parable of the one-talent man, not yet considered, is the insulting climax of his alibi. The reason he wrapped the talent in a napkin and buried it in the ground was, he said, because he realized his master was always demanding the impossible. "I knew thee that thou art an hard man, reaping where thou hast

not sown, and gathering where thou hast not strawed." Life is never an easy master, nor is it intended to be so. We must reap more than we sow, if we are not to starve. We must gather the untended foison of every field if life is to go on. Recently we have been taking lessons in these facts in the days of the world's supreme calamity. Only by doing things that the best scientific demonstrations showed to be impossible was victory to be won. It was demonstrated to Nazi satisfaction that the airplanes could not be constructed, the liberty ships could not be built, and we can still hear in echo the howls of derision from our own side at the suggestion that what we have done was possible. Our two-plussers were vociferous, with "facts" on their side, and the brave souls that attempted the impossible were called crackpots and were obstructed on every hand. But the "impossible" had to be done or the world was lost. It would seem that man can achieve very little until he is driven into attempting the impossible. This faith in the impossible is the only power which can overcome the strength of the ancient dogma of two plus two. This is no new strange doctrine for it is written into life and demonstrated in the least struggling amoeba, and stated in an old, old book, which was far less modest about it than is indicated by the title of this chapter, when it declared that one man with a righteous cause should chase a thousand, and two should put ten thousand to flight. Stated in the symbols that mathematicians love it stands thus: $1 = 1{,}000$, and $2 = 10{,}000$.

CHAPTER XVI

"Thee Over Thyself I Crown"

ALL LOVERS OF DANTE are familiar with the passage in *The Divine Comedy* where Vergil, having escorted him through the *Inferno* and the *Purgatorio*, is about to turn him over to the guidance of Beatrice into the *Paradiso*. Vergil takes leave of Dante in the words: "Thee over thyself I crown and mitre," indicating that Dante, in achieving self-mastery, has achieved freedom as well, and has become his own sufficient king and priest. These words provide us not only the basic principle of Dante's immortal plea for freedom, but also one that invariably underlies every freedom of any sort. The lost souls imprisoned in the *Inferno* are there because they are the slaves of their own lusts. The barriers that shut them off from Paradise are barriers of their own making, and the sea of ice in which they lie congealed is nothing more than the callous coldness of hard hearts that had not mastered themselves. They are prisoners of themselves.

In the preceding discussion on the freedom of the will, it was discovered that freedom consists primarily in the making of right choices. The reason for this lies embedded in the nature of personality. The putting of an inferior good in the place of a higher is destructive of self-control, and at the same time disintegrating to the person. No one can be untrue to the higher mandates of the spirit without becoming thereby, and in that degree, a slave. No longer master of himself, he makes it so much easier for lower impulses to take control, until the slavery becomes at last complete. The slavery is not one that is pressed upon him from without, but a slavery to which he consents, and for that reason it is all the more powerful and destructive. He is caught by a voluntary and ever-weakening surrender to the forces of evil. The result is as inevitable as the forces of the law of gravitation, and can in no way be avoided or overcome except through the regaining of self-control. In this we have the most neglected factor in ordinary discussions of freedom. Freedom is commonly thought of as liberty to do as one pleases, a liberty that looks in the direction of license, that emphasizes rights and privileges at the expense of duties and obligations,

yet these latter form the essential basis of every successful democracy and every free life.

Freedom and Constraint

No term of social and political discussion is perhaps more commonly abused than the term "freedom." Not alone in the crises of the French Revolution were crimes committed in the name of liberty. The definition of freedom like that of such other words as "orthodoxy" is not standard, but is made by every man according to his own prejudices and predilections. Freedom has been made to stand for license, for looseness, for illegality and disorder, for tyrannies the most complete because the most irresponsible. Despite all this there is widespread agreement that freedom is the basis of law, politics, art, science, religion, and life. Only so elemental a position would have allowed it to survive its numerous and time-honored perversions. There must be something in it akin to eternity as a demand of the human spirit. Experiments unnumbered indicate that the only permanent power in politics and government lies in the principle of freedom, and the principle has been demonstrated anew in the supreme and terrible crises of our day. Dictator and aristocrat, plutocrat and class democrat, each has affirmed that the only safety lay in enforcing his will against that of all others, but it is a perversion of freedom where one class or clique rules to the disadvantage of another. A benevolent despotism can be more tolerable than an intolerant class democracy. In the school of history, any type of government that has been tried has been found unstable, to the degree that it denied the largest measure of freedom consistent with the general good. It has also been demonstrated that no government can long endure which does not have the cooperative self-restraint of its citizens. Law cannot be adequately enforced apart from the desire of law-abiding citizens, and it is always the preponderance of these that insures the institutions of freedom.

Freedom is likewise the necessity of creative art. Trammel it by unreasonable convention and you stifle it. Yet, on the other hand, it would be a mistake to consider unrestrained freedom the mother of creative art. It is possible for the artist to kill within himself the power of creativeness by lack of self-control. Much that calls itself art is not so because it is lacking in that self-restraint which gives power. Unrestraint is ugliness by whatever name. A certain economy is required in all beauty. Art like politics gains its freedom through an internal self-abnegation. Perhaps the beauty of the

circle lies for us in the fact that it represents the combination of the greatest possible freedom with the greatest restraint. No line of beauty is disclosed in mere lawlessness.

As it is in art, so it is in religion and life, freedom and restraint are inseparable companions. No man can be made religious by outward constraint, whether it be of political character, commanding his worship, or the more formal limitation of an authorized creed, which other minds have made for him. Nothing could be more futile nor more foolish than to attempt to constrain religious belief or practice. Religion is of the heart, not of the outward movements. Any repression which deprives the person of the full right to come to his own conclusions, denies to him in the same act the possibility of religion. On the other hand, religious freedom does not involve loyalty to loose opinion. The religious thinker is also bound to the principle of self-restraint. He cannot honestly discard the religious wisdom of other men and other ages according to his whim. He is religiously bound to give them hearing, and he must consider their relation to practical ethical values. He is best fitted to achieve religious freedom, not who cuts loose from all conventions, but who feels the obligations to consider fairly the past, and the spiritual discoveries of other men, and of other religions, as well as his own.

Science also prospers most under institutions of freedom and for the same reasons. Often in history the advance of knowledge has been hindered by all sorts of restrictions, statutory provisions, political, or ecclesiastical, and by common ignorance or intellectual prejudice. Men of any established order are prone to resist the unsettling effect of discovery. Intellectual or scientific dogmas, once set up as standards of judgments are easily mistaken for facts of knowledge and engage to keep the status quo against disrupting discoveries and practices. Science advances by the proposal of hypotheses which really constitute a cosmic philosophy. A theory of physics is not to be had apart from a conscious or unconscious metaphysics. If the hypotheses posed prove valuable for purposes of classification or practice, they are frequently assumed as independent facts. If they are but partially true, they may then become deterrents to knowledge, which have to be overcome and displaced by more accurate generalizations. At times the battle of scientific dogma can become very bitter, but there must be complete freedom from institutional domineering if we are to arrive at the truth. This means freedom from the preconceptions of science itself, as well. At the same time, there is a self-restraint demanded in scientific effort as important, in its way, as freedom. This lies in the re-

spect of the individual scientist for the hypotheses and opinions of others, which keeps him back from ill-considered pronouncements.

Freedom and Self-Restraint

A common thread runs through the freedom we have been discussing in the various and widely separated realms. The restraint necessary to the achievement of freedom is, in all fields alike, not constraint from above, but restraint exercised by the individual from within. Under this definition, freedom becomes a truly human value which cannot be divested of moral meaning. To illustrate our thought let us consider for a moment the result of unrestraint. Applied to the artist, the unrestrained line means lack of form and the death or perversion of art. Perverted art is not art. Applied to government, freedom for every man to follow his own pleasure implies the end of organized society. Applied to science it displaces ascertained fact with extravagant and unverified claims such as are sometimes encountered in the popular press. Applied to religion it brings descent from ethical achievement in practice, by substituting an unethical emotionalism as far from righteousness of conduct as the spinning of whirling dervishes. The loosening of restraint in ethics brings the decay and atrophy not only of moral power, but also of religious sensitiveness and capacity for freedom. Anything short of complete good will, of perfect holiness, or the effort after it, is something less than religious freedom. Perfect freedom attends alone upon perfect goodness.

To our own age as to other ages, self-restraint is hateful. For this reason we place emphasis on achievement. Restraint without achievement is nothing, but achievement without restraint is worse. We need achievement through restraint. Things then begin to happen. We are too often lacking in the reserve power which self-restraint gives; too often short of that calm which attends strong reserve forces. We feel so competent within ourselves that a Martian observing our mental attitudes might consider us the first of our race, so restless are we at the lessons of history, so contemptuous of the thought of other days. Moreover, we often act as if our age would be the last, as if all must be completed in our own generation. We have too largely ceased to consider life under the aspect of eternity. This lends a superficial glitter to what we do and think, but it keeps us living continually under the threat of intellectual, social, and moral bankruptcy. The way into a new golden day of literature, art, government, and religion can be only by a larger realization of the moral self-restraint in which all freedom rests.

Freedom and the Person

The relation of freedom and self-restraint to the development of personality is as vital as it has been shown to be in the various departments of human activity. Here it is even more vital, because in the person we are dealing with the primary reality. In his *Classical Dialogues* Walter Savage Landor has painted the picture of the true person in telling phrase:

> Him I would call the powerful one, who controls the storms of his mind, and turns to good account the worst accidents of his fortune. The great man I was going on to demonstrate, is something more. He must be able to do this, and he must have an intellect which puts into motion the intellect of others.[1]

In a profound discussion in his recent book *Slavery and Freedom*[2] Nicolas Berdyaev called attention to the fact that a man is never really enslaved from without unless he is first enslaved from within by his own consent. This seems a hard saying in our time, in which millions have been involved in servitude, a servitude which to the civilized world had become unthinkable. It is easy for those of us to cast an easy judgment who have not faced Nazi or Communist slavery with their alternatives of torture and death. The deeper fact is that these occasions had been preparing for many years in modern society by a surrender to false principles which eventually engulfed the innocent with the guilty. It should now be perfectly clear to us how great is the tragedy which awaits a society that casts off spiritual sanctions as something negligible, and is willing to compromise with righteousness and justice for the sake of more comfortable living, or for the protection of moral recklessness. Nor can we of America, who stand relatively free from the orgy of murder that has overwhelmed Europe, deliver ourselves from a measure of moral responsibility. There are problems of social class and racial injustice, the presence of which indicate our own involvement in the wickedness that has caused darkness to fall across the face of the world. When society generally becomes too anxious for comfort or private advantage to secure the reign of justice, the whole world is involved in tragedy. There is no way to stop the infection by drawing artificial lines of geographical boundaries. The reason for this is that wide sections of society become enslaved inwardly by their affections and lusts, preferring these to justice, and so make wide preparation for an external slavery that is sure to follow. This moral infection was first disclosed notably perhaps,

[1] Scott, London, 1884, p. 69.

[2] Scribners, N. Y.

in the "scrap of paper" incident in World War I, then in the subjugation of Abyssinia, the crushing of legally instituted democracy in Spain, and the unprovoked attack upon Czechoslovakia, while the less-culprit nations found their hands tied by considerations of political expediency or the hope of financial profit. No wonder that the peoples, who had already sold themselves out to the devil, felt justified in assuming that the soul of democracy was dead, and ready to be followed by a quick demise of the body. In the meantime the Christian church has found courage, for the most part only sufficient to trail along with the winners. The light will not come, the darkness will not lift until there is moral and spiritual renovation. In this, those who call themselves Christian must lead the way, yet how unprepared and how reluctant do we seem. If we as Christians do not arouse to the situation, a deeper religious consciousness must seize the world than that which is now professedly Christian. This bit of digression has been made in considering the spiritual debacle of our time, partly because world-wide relapse from the spiritual mandates could come only through the defection of individuals, and partly because it illustrates graphically the disintegration of individual personalities. To be truly a Christian is also to be truly a person, to have an inward completeness and unity, a mastery of self which alone can cast out the fear of death or of worldly misfortune. This fearlessness comes with a supreme realization of the values that attend godliness. To put a lesser good in the place of a higher means inevitably the destruction of personality. The person cannot listen to the multitudinous demands of conflicting interests, the call of passion, the lure of self-interest, the temptation of the basely emotional, or even the blandishments of a false intellectualism, or of self-seeking religion (just enough goodness to escape hell-fire) without a dissolution of personality. We must backtrack to righteousness, not alone to the appearance of righteousness.

Freedom and the Cosmic Order

We should not close our discussion without considering whether freedom has more than a personal value. Has it any right to be called cosmic, or universal? This is one of the most perplexing problems of the day, both in philosophy and in science. Is freedom found only in the exercise of choice by human wills, or has it a basic place in the world order? Is there contingency in natural law? Is the succession in phenomena laid down automatically, and if so why? Are the laws of nature self-executing or do they demand

a higher will? It is very easy to assume that they are automatic and self-contained. But one can make the assumption only at a great price which has not been generally sufficiently considered. To commit one's self to noncontingency in the world order is to vacate at once the presumption of evolution. Are the uniformities which we describe as natural laws established by accident? How can accident provide a rising scale of complexity and mutual adaptation? If it is impossible to consider the natural order as displaying purposive cause, then of course nowhere can there be freedom, neither in nature nor in man, for man is himself a part of nature. If, on the other hand, we can assume contingency in the natural order, and contemporary science backs us up in this claim, there might be an Intelligence supreme to, but working through, self-prescribed uniformities toward a preconceived end. Such is not only the sole explanation that can bolster the doctrine of evolution, it is the unique basis on which any explanation of existence becomes possible.

Moreover, such a Cosmic Intelligence, being free must likewise be moral, and can achieve perfect freedom only through perfect holiness, complete personality. These assumptions follow in the wake of freedom. On the other hand, we meet with insuperable difficulties and embarrassments in any defense of freedom which does not assume it to be a cosmic reality. Freedom in the individual argues freedom in the world order and in God, for it is unthinkable that any power should exist in the creature man which does not exist in the forces of creation. If we deny freedom in the cosmic order, we cannot logically refuse to go the full limit of materialism and deny it in ourselves. But the materialistic position is now deserted by the great outstanding scientists of the day, and even the rankest materialist, if he be at all sensitive, finds himself in deepest embarrassment where he has looked for confirmation and encouragement.

CHAPTER XVII

The Person As Continuum

ONE OF THE MOST RECENT DEFINITIONS that the scientists give the atom is a complete revolution from the long-prevailing concept that it is the indivisible unit of matter. The atom is now said to be an "event in a space-time continuum." Following this precedent, might we not form a new definition of the person? It would, perhaps, run like this: a person is a continuum in a world of space-time events. There is logical reason for the second definition if we allow the first, because there is no continuum apart from continuum of meaning. Any continuum must be set up by a self-referring subject of experience. A continuum is a succession of events which themselves are without duration. To an observer the succession has meaning because his own experience transcends time and he sees events from the standpoint of past, present, and future. Events are ended with their moment of existence except for some person, persons, or a Supreme Person who overlooks the whole process of time, and to whom the succession has meaning. Aside from persons to interpret the succession into meaning, there could be neither science, history, nor religion. Here lies the reason for the growing appreciation of the fact among scientists, that our whole body of knowledge is quite as much made up of internal interpretation of sensations as of external existences. With a differently functioning set of sensations we should have a quite different world. The person is not only part of an external world, it is also true that the external world is a part of him. The discontinuity of events is illustrated in the growing corn. We first plant the seed in the earth. As an *event*, the kernel we plant has no obvious connection with any preceding plant. The mother stalk no longer exists, excepting for some spectator who connects this present with a vanished past. The first shoots, adding novelty to the combination previously existing, constitute a new organism, in fact a succession of organisms as the process of life goes on. The matured stalks with the ripening grain present a different physical entity, both in substance and in response to environment from that possessed by the initial event, a kernel of corn. Should we say: all this is independent of my interpretation because while I slept the process was

taking place? If we consent to cut this meaning of succession, which gathers the original kernel and the matured new crop into unity, there would still be important questions to ask. Has the growth of this grain any meaning for the order of nature? The answer must be yes, it is a part of a whole universe of meaning, events that could have an evolutionary or a continuous interpretation only if they fall within the creative power and observation of a Supreme Intelligence. This conclusion becomes increasingly obvious as we consider the general character of life and its relation to continuity.

The Meaning of Life

What do we mean by life? Let us begin with life in its simpler forms. Here there will be little to distinguish the living from the dead, the organic from the inorganic. That little seems to reside in a power of adaptation, and mastery of environment. The organic has a power of separating itself from its environment, and also of assimilating its environment, to build up its distinct organism or species to something more. This power of adaptation, the ability to put itself *en rapport* with its environment, in order to overcome and transform it into its own kind and uses, is what we call life. We shall need to remember this definition of life, for it is characteristic in all its forms.

If we seek to discover the applicability of this principle to the higher forms, we shall find it in personality also as part and parcel of the universe of life. Personality is, in its truest sense, a living adaptation to a moral and spiritual order impossible to simpler and non-self-conscious organisms. Some degree of personality might justly be accorded any organism capable of self-consciousness and so, of memory. The power to relate events into a coalescence with the self is the beginning of personality. The dog that anticipates its meal from the sound of scraping dishes has learned something about a relevancy between a continuously existing subject and a succession of events. Such an experience in the time-space order calls for the complicated organs of consciousness. There must be nerve cells and brain, and control of members in the direction of desire, but this would be personality at its simplest stage. It is impulsive and automatic and on the level from which most of our psychologies are written. When we come to the human person we find striking distinctions from self-consciousness in the animals. In the person we have much more than reactionary response to impulses, we have also an attendant consciousness of conscious states. Here lies the omission fatal to so many of the conclusions of animal

psychology. The dog who shows joy at the return of his master does so in response to physical stimulus, the connection of his master with frolic, food, petting, and a thousand other pleasurable sensations. The servant who rejoices in his master's return may have mixed feelings. He may not be so happy as he thinks he ought to be. He asks himself whether his joy springs from motives of unselfish love, whether it is only pleasure in a provider, a protector, a flatterer, whether it is worthy of him. This is the mood which attends human consciousness and distinguishes animal from human personality, but it is of an essentially different and higher order from the animal. Life, in evolution, seems here to be at a parting of the ways even more profound than the jump from the inorganic to the organic, or from the chemical affinity of the inorganic to the assimilative and constructive capacity of the organic. In this power of reflective self-consciousness we are in the presence of a new and different set of adaptive powers which seem like Melchizedek without adequate or visible forebears. The simple cell enters the world of organic life by exercising its organic functions, or, failing this, it loses its privileged point of vantage and falls back into the lower and inorganic. Likewise it is possible for the being that stands upon the verge of the spiritual order to refuse to enter, and to reduce its activities to a lower plane of activity, that of the animal functions. This capacity is due to the presence of the reflective self-consciousness. The highest type of personality is realized in an active and living adaptation to a moral and spiritual universe.

Persisting Life

There is a strange immortality about the cell. From one standpoint it is the most fragile and effervescent of all things, forever in a state of death. But much more is it in a state of unceasing life. It dies that it may live. So we have the original cell, forever dividing to create new cells, the last cell partaking of the first and bearing the original characteristics. The important activity about the cell is the transmission of these characteristics which may never die, since it is possible for them to reappear countless generations down the line, and after their seeming disappearance for generations. Should one wish for greater magic than this? Should it be difficult in the face of this fact to believe in the immortality of the higher organism which has learned to live by a more meaningful reality, namely the human soul? In the case of the persistent personality we have however added data of confirmation. In the human per-

sonality we have continuance on the part of the same *self-conscious* subject of experience. Here we have hit upon a higher unit than is known elsewhere in the realm of life, a unit whose function it is to see its successive experiences as a significant whole. Its consciousness of perpetuity does not lie in the renewal of its physical organism but in that which transcends the physical organism, not in the metabolism of the body but in an enduring self-consciousness. In this case, immortality is dependent upon the survival of the matter-transcending, enduring, self of experience.

Another question immediately arises. If life is to perform so great a marvel as this, can it be justified by the quality of the result? Deathlessness implies some worthy end. If any life is to continue anywhere it must continue not by fiat but by functioning. Life persists by continuing to live. It has still something to accomplish by living, even if it be no more than to produce the full corn in the ear, which is the function of life planted deep in the original kernel. Eternal life in the person demands an eternal quality in its present living. It is a growing and continuous adaptation to its moral and spiritual environment. When it ceases to function in this higher environment, just as in the case of physical life, it atrophies and dies. It may die in this higher sense while it still lives in the lower. If we hold to the immanence of God and the moral quality of the universe we shall conceive spiritual life as the conscious harmonizing and adaptation of the personal will to the Divine order. So long as a Divine order shall endure there is every reason to believe that such beings as realize themselves in and through that order will continue to function and live until they arrive at fulness of personality. The relation of a Supreme Creative Intelligence to the order of life, and the presumptive character of the Eternal Goodness, provide a reasonable assumption for the continuance of that eternal quality of living which is already begun in devout souls. The universe cannot be conceived as taking a greater interest in physical life than it has care for the highest manifestation of its life in the realm of spiritual achievement.

What of the organism which has the opportunity to enter upon the fulness of life and refuses to do so? For it there is the law of atrophy and deprivation, most tragic of all laws. There is in this no blame to be attached to the World Ground. Life proves its worthiness by normal living. On the other hand, no power, without sacrifice of all rational meaning, can make eternal that which does not by its own choice seek eternal qualities. Any life living by, and acting in accord with, environments that transcend the physical

order is already no longer dependent for its functioning upon the persistence of that order. This being so, and since it has been demonstrated that the spiritual order of living is worthy, there is reasonable asurance that it will endure when the temporal has passed away. To some, another question will appear at this point as having a supreme importance. How about the eternity of evil, a sort of spiritual negation of spirituality? What about the soul that functions only according to evil? The only answer philosophy can return to this question is perhaps to point out the incongruity of ascribing eternity to evil if we are to assume the persistence and the conquering power of goodness and of God. A universe cannot long remain divided against itself. Life everywhere shows ability to overcome, and here again our answer will be according to our mood. Is this a universe of life or of death? If this is a universe chiefly characterized by death, the theistic assumption is itself the cruelist of mockeries. The only extenuation for the continuity of evil souls would seem to be to provide further opportunity for weak and feeble remnants of a spiritual life to grow to normal goodness. How that could be without disrupting the reality of moral character is too much for mortal mind to declare. Insofar as evil personality puts itself out of functioning relation with the universe of spiritual values, out of harmony with life, with the universe and with God, it dies. It is difficult to imagine where in the cosmos it could find a place of continuance as everlasting death, or why that continuance should be deemed desirable.

Interpretation by Function

An examination of the nature of knowledge will show how completely even scientific knowledge is an interpretation of reality by function. Scientific treatises are divided between two methods: the method of description, and of interpretation by function. We do not know what the forces of nature are, but we can describe what happens in the way of activity, or we are able to discover uniformities in the functioning of living things. What electricity is we do not know, but we know how it acts. We describe it as a force in terms of its activity, or we set forth the uniformities of its activity in terms of its function. There should then be no protest from the scientifically minded when philosophy or religion apply similar methods in the field of human values. If the lower and simpler orders of life do not disclose their essence or ground except through action, it is enough if we can make similar tests for life of the higher type: that is, the tests of experience. In bud and flower

and seed we have a disclosure of the future of the plant, though not yet in existence. Future promise is as profound a truth about plant structure as any, whether or not it comes to fulfilment in any particular individual. Dr. John Watson (Ian Maclaren) once wrote of this principle as applied to the life of man. Suppose we were to walk along the edge of an inland lake and see there a strange bird resting on its placid waters. Its mighty beak, wide-spreading pinions, and strong sinews, however, indicate that it is no native of this inland scene. It is only resting there for the night. Tomorrow it will be gone into the mists and storms and wide expanses for which it is prepared to function. Though my eye had never observed the ocean itself, the powers of this bird, its capacity to function tell me, in language not to be misunderstood, of those wide seas that are its natural habitat. So also with the spirit of man that beats its wings forever against the bars of its earthly prisonhouse, there are the spacious realities, the larger relations in which it is fitted to use its powers. It is now and here possible for man to live by higher impulses than those of the animal, eating and drinking, and seeking physical satisfaction. There is the life of the soul, of the mind, of those interests of which the animal is incapable, and in these we find the life of the larger sphere already begun. The possession of life of an eternal order here is the best evidence we may have of an eternal life to come. The capacity to function after a spiritual status, to set one's activities to a nobler note is, in the nature of life itself, eloquent of the life to come. As the plant by the preparation of its seed for a coming existence demands another world for its completion, so the higher life of man, incomplete in the short cycle which we know, provides unmistakable reasons for the assumption of immortality. Furthermore, to remove from the perspective of this present life the prospect of a future is to leave the world of today entirely without rational grounds of explanation. If this life is all, then we are of all creatures most miserable, and the universe itself an insoluble riddle.

One more fact should engage our attention, which is that the solution is not met by anything short of the continuance of the individual person. This life, worthy of continuance, is not only the experience of an Absolute, or a Cosmic All. It is the experience of a very factual, definite subject, the individual. To give immortality any meaning it must be thought of as the continuance in activity of a very particular life that has begun and run its course here. The life which gathers into selfhood its defined objects and experiences out of the primeval chaos is a creation in itself, whose

meaning is incomplete apart from personal immortality. An immortality which would be but the survival of a man's work and influence, or a re-absorption into a Universal Soul falls altogether short of both the fact and the requirements of immortality. Moral decisions, and the whole character of spiritual living depend upon the continuity of the individual stream of memories and moral choices and consequences, which constitute the person as a fact of indubitable experience. To dream of its extinction in an All, is to negate the meaning of life. The person who has already begun to live in an eternal field of correspondences, which transcend both space and time, and the physical order, has already begun a career of immortality. As the abiding subject of experience his moral acts constitute the person, and cannot be held to pass away without assuming principles repugnant alike to science and philosophy, the destruction of energy.

Nor are these considerations all. Since evolution is unthinkable, without a Purposive Agent within or behind it, the explanation of the universe demands the existence of a continuing Intelligence as the World Ground. In the creation of a moral universe which must be held to be the climax and summit of the evolutionary process, as the greatest saint surpasses the simplest amoeba in meaning and in fact, man himself is a co-creator with God in the supreme creation of all. Shall the builder of eternal reals be considered of no moment to that which he creates? It is incredible that this person should not continue with the continuum which he here is and which he here creates. In this conclusion we are confirmed by all the voices of a living world, and the nature of life itself. But immortality is not hereby demonstrated, it must ever grow on the bough of faith, for faith too is of the essence of immortality.

A further thought constrains us. Everything that is exists by reason of its interrelatedness. In the kingdom of man each exists for himself but as a contributor, a creator, not as an end alone. We need only to read the story of the rocks in order to catch the interrelatedness of mundane history. We are part of a yet completing process. It does not yet appear what we shall be, but we have not realized ourselves to the full until we have made ourselves a part of the world process of which the brief history of man's occupancy of the earth is but a minimal portion. As the rocks have given way to vertebrates, and the vertebrates to mind, and mind to spirit, there looms before us an undeniable process of creation of which we form a part. All this is meaningless to the man of no faith who is unable to take in reality as a process, just as an unenduring ob-

server might refuse to see in the early stalks of the corn the possibility of the ripening grain. Nevertheless life is there, and the existence of life proclaims a life to come. All that has gone before us is vocal of you and me, looking toward us and our day, and if this fact is to be seen in its full significance, it can only be as we consider ourselves a part of that world which is yet to come. As Sherrington[1] has written in one of his most brilliant passages, we are to consider ourselves not as an end but as a means to a further end. Since the consciousness of personality is a new creation in the world process, a new order of life appearing in evolutionary progress, we have a right to expect that it too is bound for further development. Because the person is an apparent aim in the evolution of cosmic history, he too shall find himself perpetuated with an even greater reason than the life of the simple cell which we already see in its realm of being enhaloed with the fact of immortality. The continuance of the person is more sure by the very degree in which self-conscious and directive intelligence is more important to the highest manifestations of life than is the atom.

[1] *Man on His Nature*, Gifford Lectures, 1937-8. Macmillan, N. Y., p. 320.

II

THE PERSONAL WORLD

CHAPTER XVIII

"Seeing Things"

FOR SAGE AND PEASANT, for philosopher and clown, there is alike a common test by which existence is judged, and it is this: What to the individual experience appears to be most real? The riddle thus proposed to every conscious being is like the riddle of the Sphinx—he who cannot answer it in some fashion is devoured. Whether we assume the reality of life to be eating and drinking, the pleasures of the senses, the accumulation of wealth, escape from toil and responsibility, the acquisition of fame or social position, progress in learning, or the achievement of righteousness, whatever we assume to be supremely real becomes the unconscious judge, arbiter, and guide of life. Just as our judgment of reality determines life with respect to values, so is it with our philosophy. Any philosophy is to be tested by its definition of reality. Here we stand at the crossroads of thoughtful endeavor, and how we read the signs, and the direction we decide to take will determine the character of our philosophy. This is true in spite of the fact that we live in a day which is suspicious of the ways of formal logic. The old times of unquestioning belief in conclusions determined by academic premises have passed away. We have arrived at a saner mood respecting the compelling significance of dialectical judgments. We grow impatient with the man who insists on unavoidable conclusions thus achieved. Nevertheless, it is a fact that the superstructure of thought cannot be more profound than the basic idea from which it springs, just as we cannot expect to rear a pile of stone and granite on shifting sands. Men have often failed to take this fact into consideration in the realm of speculation, and have toiled at superstructures of thought which could not withstand the vicissitudes of time, of criticism, and of discovery.

Even in the face of the growing enlightenment of our day, the problem of the meaning of reality has not become an easy one. Each age that does not spend its energies in a slavish aping of the past is prone to think too highly of its own intellectual achievements, and ours is such an age. Scientific advance has given us new cause for taking inventory of our ideas, and at first glance, it might be presumed that the added data would be conclusive, but they are

not. There is not now the certainty about the nature of reality that prevailed fifty years ago, as there was then less than a hundred years earlier. Despite the discoveries of science, we are in some respects less prepared to deal with the question of reality than at certain periods of the past, due to the loss of inner assurances. For man has begun to doubt himself, his very existence, and the reality of the only values that make life worth the struggle, the realities of the spirit. The overemphasis of the place and the surety of induction as a method of knowledge have removed from the scholarly world the reflective mood and mind, in the interests of what is commonly called the practical. However, for the past quarter century there have been growing evidences of a sea change in human thought, which threatens a reversal of the shallow moods of yesteryear. An element of hope may be found in the fact, that far from being settled, the problem of reality is now more openly questioned from every standpoint, practical, scientific, or philosophical. We can only nurse the wish that we may add something of light, without adding to the general confusion.

At the risk of seeming superficial, let us glance but briefly at the principal efforts that have been made to describe reality.

Ways of Looking at Things

The easiest and most obvious of all explanations of reality is the most common one, of matter. To the man of the street reality is, like that of Dr. Johnson, something he can trip over in the street or something against which he can bump his head, and that is the end, as the famous Doctor also supposed, of all argument. Reality, to such a man, is something that is seen, that gets in the way, that has extension, that can be moved from place to place, is impenetrable, and lumps of which can be built into larger masses. One might, he thinks, rather doubt his own existence than to question matter as the most real of all realities. The man who does question this seems to him endowed with moronic mind and justly caricatured as a boob in a mortarboard hat. Thus the materialist builds up a series of quantitative combinations, with the aid of a very immaterial imagination, of which he is quite unconscious. Out of indistinguishable lumps, with the aid of motion in space, he thinks he achieves a world of qualities, ranging from the colors of the spectrum to the ideas that throng his mind and the impulses that move his soul. This precarious result is undone, by even the slightest reflection. If he reflects, he is driven to mystery, for there is an inherent incommensurability between the activities of matter and

the qualities of mind. In his sturdy dependence on matter he is led to deny altogether the existence of mind, except as a movement of matter, which is meaningless. The classic confession of ignorance in the realm of philosophy is the ultimate definition of matter which it cannot avoid, as qualityless "thing in itself" which holds or throws off qualities but is itself unknowable. He thus closes the case by begging the question, admitting that we cannot know what reality is. Fortunately, the materialist is forced to go on as if the contrary were true. He gives thought no place in the general scheme of things, yet he exalts it by thinking; he denies reality to the soul, yet finds it the reality he most prizes in his friends. In other words, he is a theoretical materialist and a practical idealist, so that he may not read himself out of human companionship. Were his theory true, life would be robbed both of sweetness and light. The recognition of human values is gone at a stroke. By fundamental definition he has impoverished himself of everything worth while. He holds to a theory which in practice he dare not admit as true. In addition to all this he imports into his theory of reality, unconsciously perhaps, a directing Intelligence, under the terms "Nature," "Evolution," or "Function," by personification.

There is another type of thinker who, like Spinoza, gives plausibility to a doctrine of substance through endowing matter with immaterial qualities by ambiguity. Such a theory enjoys plain advantages in argument, for one can claim to have it and to have it not at the same time. From one standpoint, matter is characterized by its immateriality and the same arguments can be alleged against it that can be urged against personalism, but with this significant difference. The Spinozan, unlike the personalist, is deprived of the appeal to experience. The Spinozan impersonal essence of substance, wholly intangible must be assumed as the ground of the tangible. Having no power of direction it must direct. The outcome is confusion, not only with respect to the meaning of reality but also with the existence of moral values, a matter of even greater moment.

In an analogous position is the neorealist who defines reality as an impersonal relation. He appears to discard both the subject and the object in an attempt to affirm a relation between them. Like the substance of Spinoza his reality fails to satisfy because of its impersonal character. There is nothing in impersonal relation to ground this or that particular experience, and to relate experiences to each other. The attempt to overlook the supreme reality in experience, the experiencing person, leaves everything to be desired.

We need deny neither the world of objects nor the world of subjectivity, the important reality is that privileged existence in which they are united.

To the idealist, a sufficient account of reality may be made upon the hypothesis that the idea or the concept is the fundamentally real. Organization, intelligibility are written all over the universe and may easily be viewed as the most important part of it. Especially to the cultured and creative mind, the concept or idea may easily appear the source of creative activity. So important is intelligence in the working of intelligible results, that it is easy to assume that objects of any kind must exist first as ideas. For the man of introspection this conclusion grows out of the discoverable relation between his self-consciousness and his activity. No painter puts on canvas a picture which has not first had its place in his imagination. The skilful adaptations of nature are most obvious to him. Seeing these, and conscious of his own purposive creative effort, he assumes that things are emanations of a Supreme Creative Absolute, which itself is perfect and unconditioned, and of which the imperfect world is the shadow, partially realized. The conception is among the grandest in the history of thought, but it is won at too great a price. In assuming emanation from a Universal Intelligence it must charge to the same source the ignorance and evil that manifestly exist.

In the beginning of Goethe's masterpiece, Faust is represented as jaded with the quest for reality. Having explored every realm of mental endeavor, he turns in upon himself with the depressing consciousness of "no solution." Under the stress he picks up his New Testament and is led, was it by the spirit of Spinoza, to substitute for the term logos or "word," that of "act" and to render the opening lines of the Gospel of John: "In the beginning was the act." Is action then the essence of reality or being? Is it true that simply to be is to act? This definition has captured many of the brightest minds in philosophy. The bare statement is capable of great development, but it cannot be maintained in the abstract manner stated. An act calls for an actor, particularly if it is to have any significance. An act to be meaningful must embody a purpose, must work to an end in view. Reality then demands that behind the act shall be intelligence, self-consciousness, and self-direction, an agent. What the "pure" activist assumes surreptitiously must be brought out into the open and acknowledged. The Faustian conclusion might have been unassailable if he had moved out of the region of the abstract to join the act with the actor. "In the beginning God" still

stands. The actor may be in and through his action, but the act never stands alone.

A much more common definition of reality today is that which describes it as a "law of change." This view wins wide credence by reason of the respect the scientific mind has for uniformity. Uniformity in change is erected into independence, and is looked upon as itself a compelling agent or cause. In a changing world it is said there is no permanence except the law of change. This conclusion of Heraclitus has been revived and modernized for us in the distinguished work of the late Henri Bergson. In his earlier work, the *élan vital* is the impersonal instrument of change. Law is however but uniformity in activity and says nothing of the actor except that he acts uniformly. The *élan vital* has to assume the qualities of personality to make the system go. Bergson came to recognize this in his later work, particularly in the *Two Sources of Morality and Religion*, wherein he takes the full personalistic position. If reality is change, and nothing abides, how does the notion of change arise? Obviously there could be no knowledge of change, unless as Bergson recognized, there was also duration somewhere. But duration, conscious duration, can exist in personality alone, which, while changing, survives change and becomes the abiding factor in duration.[1] The *élan vital* has to be personalized in order to make it an efficient agent in evolution.

Scientific Revolution

A remarkable revolution in the definition of matter in relation to reality is taking place at the present time. Its significance for popular thought is that it springs from scientific rather than philosophic sources. This revolutionary movement hinges upon the work which is being done to disclose the nature of the atom. Curiously enough, though science frequently disclaims relation to philosophy, much of the present hypothesis of the atom is paralleled by the Leibnizian concept of the Monad. It now appears that lumpishness, extension, or objectivity cannot be claimed as the chief characteristics of the atom. The atom is primarily active. Instead of being a center of inertia, the old view, it is now seen as the center of force. Mass, objectivity, extension, impenetrability are now represented as varying intensities in fields of force. True, some physicists cling to the older assumptions. *Alpha*, *Beta* and *Gamma* particles are viewed by them as a sort of a divided atom, a severing of the "indivisible," smaller lumps broken off from the larger, and

[1]Compare Flewelling: *Bergson and Personal Realism*, 1919, O. P.

pictured like pellets flying through the air. This is the help which imagination has been frequently called upon to furnish for the embellishment of scientific fact. Such a concept is assisted not a little by the means resorted to to make the scattering of atomic force discernible to the eye, as when the force is directed through a volatile gas, the resistance of which produces light. That there are actual lumps flying through the air, would seem no more necessary than the assumption of the ancients that the phenomenon of lightning was due to the passage of "fire-balls" through space. Here again the mind is assisted by the materialistic supposition, that being the one nearest at hand, and requiring no reflection. If, however, the world of modern physics is to be driven, as it seems in the way of being, to the Leibnizian conception of matter as a manifestation of force, and that force is to be assumed to be the fundamental reality so far as science can disclose it, a great step has been taken in the definition of physical reality. We need to remember, however, that impersonal force cannot be considered a complete definition of reality, because even force, without a resident, self-conscious, self-directing intelligence, would be incapable of providing the ground for a purposive, coordinated, and evolving world. Already we feel the old dogmatic assurances of materialism to be affected by this turn in scientific theory. It can do no less than revolutionize the field of scientific explanation. In this lies great hope for philosophy in general and for personalism in particular. If matter is but the coordinated manifestation of force, discerned only through its activity, there is all the more reason for assuming that it springs from a causal Intelligence.

Science is forever fearful, and rightfully so, of perceiving nature through the lenses of self-experience lest it mistake illusion for fact. Yet it has no other means of surveying the simplest phenomenon except through the glasses of self-interest and expectation. Do his best, the observer is seldom so disinterested as he thinks, for he cannot avoid the results of his own enthusiasms and emotional stresses for anticipated results. He must continually check his conclusions by the findings of others, but the graveyard of scientific nomenclature, with its forgotten names, "phlogistine," "fire-balls," "humours," and "animal spirits," shows how science has seldom been free from obsessions of theory and surmise. It ought not then to be an offense to science frankly to admit the personal element present in its conclusions. Indeed it is the realization of this fact, by contemporary and forward-looking science, that is assisting in opening wider fields of knowledge. In the experience of the self in relation

to the world, we happen on the nearest approach to direct knowledge, and particularly in the choice of action. Here lies our only experience of causation, and upon it hang our causal beliefs. The person can, by forming decisions, set in motion new trains of physical causes, or interrupt and turn them into new channels, which is in itself an experience of creation *ex nihilo*, or the production of physical effects by pure spirit. Here lies the base of those changes which have power to reconstruct the world and give entirely new meanings to physical existence. We actually have in personal experience the issuance of material force through the direction and at the command of an immaterial will. Is this a paradox and a mystery? Defy and deny it at your intellectual peril, for it is the most common of all experiences, the most familiar of all mysteries. It is a dependable mystery that we are called upon to exercise every day. And year by year we find the universe responding to our belief in it. It is difficult to hold back the question whether the relation of a Cosmic Intelligence to the "force" of the atom is not just the relation of an immaterial, Supreme Mind, to a material world, and acting in accordance with His own purposes. Such a conclusion may seem to involve a large contract, but except for the vastness of the scale, it is not essentially different from the assumption that I am morally responsible for my own acts and decisions.

Rational or Irrational World?

When we attempt a rational definition of reality we seem narrowed to two main types. We can assume that the universe is rational or we can assume it to be irrational. If it is rational, there is reason for presuming intelligent purpose in its ground, or cause. If it is irrational, science becomes impossible. The history of philosophy discloses clearly the dilemma we face. We have either an ordered world proceeding from purpose, and therefore intelligible, or one that can be looked at, wondered about, but never to be rationally accounted for. An intelligible world demands an intelligent source, and man himself being in the order of nature must spring from the same source. This dovetailing of intelligence with intelligibility is the basic assumption of all knowledge. If in evolution, we have causes acting through time toward an appreciable goal, we cannot avoid the teleological conclusion. Any step toward a discovery of law and order, of relation to environment in the interest of biological adaptation to an end in view, is a step that demands a Cosmic Intelligence. Even a presumption of "the survival of the fittest," or of "natural selection," timeworn in the interests of ma-

terialism as these question-begging terms are, is a presumption of the existence of a directive Mind.

If we prefer the other horn of the dilemma, that there is no Cosmic Intelligence, we have thrust upon us the unbearable burden of explaining how disorder can produce order, or how non-intelligence can produce intelligence. The only occasion on which two and two are more than four is when there is creative spirit present with power to introduce new factors into the equation. That defeat of mathematics is a strictly personal affair. This failure of mechanist explanation is a "mystery" unexperienceable enough to dismay the most materialistic. True, it might be asserted that we are not committed to either "horn" of our dilemma. The whole system of reality might be but a logical Absolute. Here again there is no passage. We know only relations, and particulars, and can never have experience of an Absolute, which is unconditioned or unrelated being. If there is such, we can have no knowledge of it. If we are but the undiscernible and indivisible parts of the Absolute our position would be like that of the mathematical point, both something and nothing; something when the Absolute wishes to philosophize, but nothing when it comes to reality. In such a case, thinking itself, as some of the esotericists recognize, is a species of impudence. The mystery of being which is locked up in personality is inexplicable but experienced; this mystery of the materialist is contrary both to experience and to reason. There is no real argument for the assumption that chaos, chance, and accident, are behind the physical order, it is not to be accorded scientific standing, but is only an unscientific fancy in accordance with one's prejudice. Nowhere else than in the battle against religion would such slipshod thinking be tolerated. If we were to observe a mob of ten thousand persons milling about, and should suddenly see them at a quiet word of command resolve themselves into platoons in correct formation, and march off in perfect step toward a preconceived destination, we would not for a moment outside of materialism think of ascribing that order to disorder as a cause, or think of it as an accident of chance. Yet the coordinations and uniformities of a drilled regiment of soldiers are incomparably less infilled with purpose than the functioning of the honeybee with respect to the cucumber.

God and World Process

The demand for personal Cosmic Intelligence behind the universe increases as we pass from the problem of simple existence, or

being, to the deeper one of becoming. We cannot establish any relation between that which is and that which is about to be except through the nexus of a personal agent. Unless we can introduce this element of the person into our concepts, we must discard altogether the notions of cause, becoming, or change. A living world can be an intelligible fact only to a self-relating person who, while changing, keeps his identity through change, gathering the passing events into a synthesis of meaning. If the world is a living process, it can be knowable only to persons who transcend its ebb and flow, and, in the wider scope of world evolution, a Creative Personality is called for, that is able to survive the whole progress of events.

What then may we conclude concerning the reality of objects? Are they blind accident and chance or is our universe vibrant, living, and changing through and through. If accidental, we can never explain the uniformity we find there, for our world is never static. It is a continuous activity which could have direction only as within it or above it there is Purposive Intelligence. Is the object but the display of force or is it purposive? Here again we have something living and continuously acting toward ends, and their adaptability to our human senses must yet be explained. Do we taste reality in the deepest sense in our own creative acts? May this not be a token and clue to all reality? Is not the creative effort of man that by which he seizes the garment of reality, and is not self-realization his highest privilege and honor? Surrounded by identical common impulsions, drawing the same sustenance from the breast of Mother Earth, as all other created things, yet his creative powers are various in their uniqueness. Every poem, every truly artistic creation, every invention and discovery, every new light upon the nature of society and the human soul is creative effort in which he so certainly lives, that to him all other life is but a vegetation, a mere existence. In himself he finds the essence and the highest expression of reality.

CHAPTER XIX

Nature Comes to Herself

AT THE PRESENT MOMENT, materialism is faced with an embarrassing and even fatal dilemma which vacates its claim to be scientific. The materialistic method has been fruitful in science because in the progress of human knowledge it restricted the field of observation to mass and motion, and withheld temporarily other troublesome questions which could not eventually be kept in abeyance. This limitation kept the researcher from considering the deeper phases of his problem, aspects which were certain to demand explanation, once he had exhausted the fruitfulness of his original concept. Instead of the famous order of the field of knowledge given us by Comte, as magic or religion superseded by philosophy, and it in its turn superseded by positivistic science, we seem to be witnessing something of a reversal of that formula of history. The concept of matter as the ultimate reality is now exhausted within the scope of scientific knowledge, and it clearly appears necessary to revert in some sort to the religious concept, if we are to have explanations.[1] The lumpish atom has given way to the concept of a center of force, or even to that of an event in a space-time continuum. The atom as conceived is now generally recognized as a figment of the mind, a symbol to assist the imagination, in something the same way that we use the arabic numerals or the italic x, y, and z for the unknown quantities in algebra. Sherrington[2] suggests that when the modern chemist or physicist warns us that he cannot do without the hypothesis of materiality, the situation is like that of an initiation into a cult. A closed attitude of mind is assumed as necessary to advance in scientific knowledge. He confesses that he cannot see the difference between this attitude and that of initiation into the spiritual

[1]R. A. Millikan: *Time Matter and Values*, Univ. of North Carolina Press, pp. 94-96.
W. F. G. Swann: Bulletin of the Bartol Foundation, Franklin Institute, Vol. 225, No. 3.
Zimmer: *The Revolution in Physics*, Harcourt, Brace & Co., N. Y., pp. 210, 223.
C. G. Darwin: *The New Conception of Matter*, The Macmillan Co., N. Y., p. 118.
Edwin C. Kemble: Bulletin of Franklin Institute referred to above.
Max Planck: *Philosophy of Physics*, Norton, N. Y.
J. B. S. Haldane: *Science and Religion*, Scribners, N. Y., pp. 47-50.
Lecomte Du Noüy: *Human Destiny*, Longmans, N. Y.
Lillie: *General Biology and Philosophy of Organism*, Univ. of Chicago.

[2]*Op. cit.*, p. 136.

exercises of St. Ignatius as a necessary introduction to the religious revelations supposed to follow. Certainly a basic assumption, like that which materialism offers, now stands directly in the way of deeper physical discovery such as the nature of causal activity.

The indubitable fact remains that nature can speak only through us. There is no world of science, no body of knowledge outside of minds, human or Divine. Science is but the construct of interpretations of impressions made within us. Should the external world be suddenly replaced by a different one which could maintain certain illusions of the senses, we should not be differently affected, something as the nerves of the amputated leg continue to report pains in the lost foot. The only realities of which we have direct knowledge are our own souls, those entities within us which extract meanings from experience and act accordingly. What the world outside of us may be, we do not know, except through the acts of our minds. We are thus brought face to face with the impossibility of considering the world of objects as independent of persons, with the expectation of learning more than partial facts concerning reality. Without man, nature is but a meaningless and broken circle. The scientific judgment of reality can then be only the common-to-all: "this is what any trained observer can see"; "this is what always or usually happens under given conditions." The uniformities which appear in phenomena become known as natural laws, for scientific knowledge means, "it happens nearly always." These considerations are essential to a true understanding of nature, her realities, and her so-called objectivity. These cannot be known except as part and parcel of ourselves. For complete meaning nature must find herself in us, or, as the title of this chapter seeks to express it, through us and through the Creative Intelligence nature comes to herself. Nature cannot be considered as coming to herself until she has realized her spiritual possibilities, and the earth is filled with "the knowledge of God as the waters that cover the sea." Nature cannot be fully known apart from her Creator. What I am getting at is that spiritual facts and values are also of the nature of things and Nature is incomplete without them.

What Are Objects?

It may at first seem a bit unnecessary to ask the question, what are objects? The naive advocate of common sense will have but one way of describing objectivity: "It is what I see." He assumes that things are exactly as they seem and that is for him the end of rational questioning. He does not realize how much of modern

science he would thus shut out at a blow. When forced by criticism to define objectivity, and driven out of his original realistic security, he assumes that objectivity resides in things, is a something which holds the qualities that are seized by the understanding. Because of the prevalence of the common-sense view, the attempt is usually made to describe objectivity in sense terms. Any effort to define it in terms of mind is likely to be resented. The sense definition includes such properties as extension, mass, impenetrability, specific gravity, or chemical affinity. All these are assumptions relative to mental experience, and cannot be stated otherwise. Impenetrability, for instance, is a word we use relative to personal capacities. That which is impenetrable to our sight or touch may be quite penetrable to flying atoms, or to x- or cosmic rays. Under such considerations we are forced to ask just what we mean by impenetrability. Should our physical powers be unconsciously increased, our old standards of foot-pounds might be entirely replaced by new ones without our discovering it. What my body cannot penetrate, the cosmic ray can. Impenetrability is then a personal meaning. Extension and mass suffer from a like analysis. Our whole system of spatial measurements would have to be reorganized if our present mastery of space and the relative position we occupy in it were to be doubled or increased in a universal way. In fact the present disruption of the world, apart from human selfishness and greed, is in some measure due to readjustments of spatial meaning made necessary by scientific discovery. We are not mentioning these considerations in the interest of complete idealism, which goes too far in the other direction, but rather to show that these seemingly substantial and independent qualities which make up objectivity cannot be separated from rational content. Objectivity must needs be described in terms of effects upon intelligent beings. How do objects make themselves known? By the sense of touch? That is an affection of the terminal nerves by which impulses are carried to the brain. The case is not different with the other senses of sight, taste, and hearing. The reality must be stated in at least two terms, external and internal. Objectivity cannot be defined in one of these alone. If there is reason to resort to realism to prevent our world from slipping into the mental illusion usually attributed to Bishop Berkeley, there are even more powerful reasons why we should not consign it to the Unknowable. In the first case even a world of mental illusion can still be the subject of intelligent investigation, but a world of unknowable substance which throws off impressions, and is yet independent of them, commits us to a denial of all knowledge. This

outcome of realisms of the materialistic sort is the best possible evidence of their partial and myopic character. A definition of objectivity in order to be adequate must include the element of intelligibility, mind, and it must be carried to a metaphysical ground if we are to assume a knowledge of reality.

Are Objects Independent?

The demand for an objectivity independent of thought grows out of the natural and justifiable feeling that it is not dependent on individual intelligence. We cannot feel that objects arise and disappear as we turn our gaze toward or away from them. The "Little Tin Soldier," though covered with rust, seems to await the return of "Little Boy Blue." In what sense then can it be contended that objectivity is in any way dependent upon a viewing intelligence? Objectivity must mean that there is to objects some meaning that outstrips our human and finite interpretations. In fact we must admit something of this kind if we are to maintain the intelligibility of evolutionary processes, extending through millennia of time. That could be only by positing the dependence of objects upon a Supreme Creative Mind for their existence and their evolution. There is reality, then, that human intelligence does not create. A thoroughgoing pluralism is shown at this point to be untenable. If as Bertrand Russell tells us[3] there are as many objects in a room as there are people, multiplied by the various aspects under which each object may be considered, and that is the whole story, it would be impossible to demonstrate logically that there is coherence in the universe. The world of common and practical knowledge falls apart and sinks of its own weight. We are thereby committed to intellectual anarchy and pure relativism. The passage of time and the swift succession of events would bar us from that duration in experience which is a necessary part of world relations. Relation to what is moment by moment becoming something other than its momentary self, with no abiding core of experience or understanding, loses all intelligible content. Changing relation, to be comprehensible, must be referred to something comparatively static. But the only existence of which we have direct knowledge that maintains permanence of identity in the midst of change is that of the person. If in the face of this we insist upon an obdurate and complete pluralism, even the pragmatic test as a method of determining truth fails us. We can, under such a theory, determine

[3] *Scientific Method in Philosophy*, Open Court, Chicago, p. 86.

truth only for the moment, and then only partially, since we cannot consider its multitudinous relations, as important as itself, and there is not time to state our opinion in words before it will have become relatively untrue. Life itself, with its teeming values, and the universe with all its objects would become a dissolving panorama, a passing phantom of experience as unsubstantial as a dream without connection, and but a degree less painful than a pure skepticism. So, while we demand that objects shall not be dependent upon our observation of them, this requirement may be sufficiently met by the comment that our intelligence does not make them altogether, since behind our temporary consciousness is an Eternally Creative Intelligence. Thus alone may we solve the paradox of dependence and independence, of changelessness and change.

The Background of Objectivity

Since objectivity has a range beyond us and our knowledge, as well as a reality within our grasp, we must look outside ourselves for an intelligent cause of objects which measurably corresponds to the intelligence within us. Which is to say that if we with bodies and minds looking out upon a knowable world understand its processes, it must be because objects and persons both proceed from a common intelligent source. Here we are face to face with the ancient debate whether it is more correct to say that intelligence makes objectivity, or objectivity makes intelligence. The answer will follow one of the two ancient alternatives and be either materialistic or idealistic, or we may compromise between the two and choose the personalistic answer. We have here no empty hopes of an easy triumph. We can here express only our belief in the reasonableness of the latter contention.

At least one grave difficulty stands in the way of assuming objectivity as the ground of intelligence. If our minds are but empty tablets on which the world of objects writes itself, where is the possibility of error? We at once assume an infallibility of sense perception contrary to our experience, for we know we are often misled as to the facts, and we know that equally conscientious observers are not always agreed. This could not be if objects are the single source of knowledge. This ancient reply to sensationalism has never yet been successfully refuted. Why do objects not always write identical truths on the minds of all observers, nor even on the same observer for successive moments of time, or change of position? Behind this difficulty lurks a deeper mystery, the relation that exists between mental action and external object. This problem

is not solvable by materialism, since the nervous impressions given in the senses are utterly unlike anything in the object, and we are forbidden by our materialistic assumption to grant reality to anything but matter. Intelligence must be held to be as true a part and source of objects as the material and external elements we have considered to be the essential nature of objects. If the problem of objectivity is inseparable from the presence of intelligence, or of intelligibility, a creative Cosmic Intelligence must be assumed as the background of objects.

Objects Continuously Created

There are, furthermore, certain other characteristics in the background of reality still to be considered. If the World Ground as the base of the cosmic order is to produce objectivity under the temporal form, and to constitute reality and permanence of meaning out of change, it must be both creative and continuous.

A single note may begin but cannot complete a symphony. In fact as a symphony, the symphony has not been heard until the last note has died away. Yet for two hours before that, it may be, those early portions of it are gone forever except to meaning. A symphony is timeless and yet it uses time as a medium of expression, being in some sort a symbol of how a time-transcending person, human or divine, can be above and yet find expression in the temporal flow. The problem has been brought to new intensity by contemporary hypotheses of science. General credence is now given to the vibrational theory of sensation, most often without any consciousness of its implications for a theory of reality. As the sense of hearing is gathered out of the soundless vibrations of the air, and the colors of the rainbow are gathered from colorless light, transformed into something different by that remarkable instrument, the eye, there is no world of color and no world of sound without the interpreting mind. My dog hears all the notes of the symphony, but he hears no symphony, and only under certain conditions of appreciation am I, the person, able to discriminate the structure and the meaning of it. To a far greater degree than we commonly realize, we must create the world that is. We have no world but that which we create. When we come to the tactile sensations by which we discern smoothness, hardness, impenetrability, mass, and extension, we seem for a moment to be on firmer ground, but not if we are keeping up with the theories of the physicists. These solid properties which have been the main refuge of materialism are seen to be as illusionary as the others. The atom

is no longer considered to be a lump of matter chiefly distinguished by mass, extension, inertia. The old physics which insisted on eating its cake and keeping it is no longer *de rigueur*. It was thought we could have an unextended, that is an indivisible, atom that could be transformed into extension by the merest addition of nonextensions. Yet the merely mathematical nature of this hypothesis did not appear to the philosophy-abjuring scientist. Under the new concept of the atom we have a center of force, or uncountable centers of force, which by their continuous activities give us the impression of mass, impenetrability, and the rest. The masses are not impenetrable for other realities moving at higher or differing speeds. Our physical bodies for which we often assume such particularity, are shot through and through continually with unobservable realities of the external universe. We are forever subject to influences that we do not now know, and cannot comprehend. If out of all this something is to be made more than a meaningless dance of atoms, there must be a continuing Intelligence at the helm. Unless there is purpose too, there can be no intelligible explanation, no surety for the world of science and of human relations. Strive how we may, it is impossible to separate the concept of creativity from the implications of purpose, or teleology. A creativity which has nothing but chance in view, has nothing in view. If the world consists of infinite vibrations and is to acquire any meaning, there must be present a persistent purpose, and a purpose which is entertained by something superior to the cosmic ebb and flow, which is not caught up and consumed by its own activity. If change, such as is contemplated in the variations of evolutionary process, is to be admitted, new terms that have not appeared before must be provided for. It is not enough to say that they were always there potentially. That is to beg the whole question. There must be unique creations for progress in evolution. It may be admitted that the new is something from without, which is incorporated by assimilation with the already existing, but it is not sufficient to say that the uniqueness is due to the chance combination of elements. In the previous member of the evolutionary series may have been a capacity to function, to build a new element into its progeny, but this would be none other than an act of creation, and if it were accomplished in the way of progress, instead of degeneration, it must act purposively and against many forces of retrogression. If the creative effect is an advance in function, in adaptation, in refinement of structure, in power of survival, it must be assumed as an example of creative intelligence working in and through the

physical structure. Thus it is reasonable to assume that the cosmic Ground is active in all existence, organic and inorganic. If now we may revert to the theory of atomic vibration as the source of sensations and of universal reality, and consider the atom as an event in a space-time continuum its activity may take place at the behest of a Supreme Creative Will. Under such a concept the Supreme Intelligence would be seen as continuously active and creative. The Creation would appear not as something which took place four thousand and four years before Christ, on the fourteenth of September at nine o'clock of the morning, as the elder theologians used to figure, but as a process dependent momentarily upon the Divine creative activity. Though such a concept raises grave problems, they may on consideration be found less insuperable than others that can be advanced. At least, under such a concept a new and a real significance would be introduced into the Pauline quotation from the Greek poet: "In Him we live and move, and have our being;" and that other word of a greater teacher touching the interrelatedness of all things: "Not a sparrow shall fall to the ground without your Father." Every wind that blows, every reaction in the test tube of the scientist, the swing of sidereal bodies in their orbits, the falling wing of the sparrow, alike manifest the presence of an Agent continuously creative, in whom as co-creators, all free intelligences, and in lesser wise, all living things, live and move and have their being. Objectivity existing under the form of time would, in the very nature of the case, exist as continuous creation. Objectivity to be real and to be intelligible could proceed only from intelligence which is cosmic, efficient, and free. If this continuously active creation seems to burden the Divine character with too much responsibility, it is well to realize that in such a case it is no greater than in a world once created and left to its independent course. The latter puts the greater strain on faith, leaving man without hope.

Creator as Person

From the foregoing considerations it is justifiable to assume the reasonableness of the notion that the objective order of existence demands a Cause which must also be the subject of experience. Why add to our troubles by saying "also the subject of experience"? Our reason must lie in the fact that intelligent creativity demands purpose, and purpose cannot exist apart from self-consciousness. This assumption clears the personalist from charges of pantheism. It may seem like a diminution of the Almighty to hold him as being in a system of relations with the temporal, but how else can he be

said to have created the world or to maintain relations with the children whom he has created? It is true that purpose is a part of temporal conditions. It is also true of any God acting in the temporal order, that any series having a before and after, requires a self-referring subject which distinguishes itself from that which it creates. If we are forbidden to believe that God by a self-limitation acts under the order of time, we cannot affirm of him any relation to the world in any degree. By assuming God as static or as an Absolute, we sever all conceivable connection between him and the temporal order. We have intimations within our own experience of how this may be, for we also in lesser degree are time-transcendent. We have already summoned the structure of the symphony for illustration, but even the static mathematical entities, propositions, concepts, essences, and values which exist for minds under the temporal form, have also a timeless significance. They are timeless in the sense that they survive those who make them, and they apply alike to the endless succession of men who will live in the temporal order. Always they apply to the conditions of a time-world and without the temporal reference would be meaningless. If the Cosmic Intelligence is conscious of a developing world order, then it must be conscious of itself in relation to that development, and in that measure its experience must fall under the temporal form. It can be held truly to transcend the time series while it works under it, by a self-limitation, for a purpose which is held in view. The existence of purpose in the world order as truly calls for transcendence in the temporal series as for immanence in it. This peculiar demand is met only when we consider the Cosmic Intelligence to be a Person. We must then in the truest sense consider ourselves as living in a personal world, and the whole realm of nature comes to herself in and through the person, human or Divine. Shall not the time come when Nature herself shall be redeemed, come to herself, and the whole earth be full of the glory of God?

CHAPTER XX

Mass Production

AN OVERWHELMING IMPRESSION has been made upon the modern world by its mastery of the colossal. We have forgotten how to speak in any language but superlatives, and the circus publicity man seems to be largely in control of our thinking. We are browbeaten by numbers, which are taken to be the end of all controversy. The quantitative aspect of modern science has been created by this uncanny respect for numbers, and has, in turn, itself helped to create a civilization that worships at the shrine of quantity. "Mass production" is the slogan of the hour by which we vainly hope to achieve every type of human well-being and happiness. Like some terrible creation of a Frankenstein this devotion to quantity has in our own time turned upon us to crush us. If we are being forced to resort to it to defeat those enemies of society who have been its blind followers, there is all the more reason why we should not allow ourselves to fall into a like idolatry. The machine easily becomes the enemy of the person and of real values if it falls into the hands of the unscrupulous, the immoral, the greedy, and the tyrannical. The main problem of the present hour is the subjection of quantitative mechanics to the control of the spirit. The next great advance of society cannot come by the invention of new gadgets, though these may drive us to new moral achievements in sheer self-defense against threatened annihilation.

The confusion of quantity with quality is a distinctly Western product. It was begun by the early Greek atomists who committed themselves to a materialistic monism in order to escape the tyrannies of pagan idolatry by which the ruling classes kept the masses in social subjection. Any type of monism is conducive to slavery of one sort or another and is in sympathy with totalitarianism. The strategy was to fight a spiritual monism with another, materialistic monism, and the war has persisted to our own time. The development of Greek naturalism with its emphasis on the mathematical realities of nature has enabled us to deal with a single aspect of being, that of quantity or volume. To make this one restricted view apply to all reality, it is assumed that all qualities are but the expression of quantitative existence. Since both qualities and quan-

tities are a part of reality, there were certain to be between them, uniformities of appearance and relation, to each other, or to some backlying causal agent that produces them both. The modern mistake has been to assume that the relation of quantity to quality was a purely causal one, in which quality was the less real.

About the time that a knowledge of Aristotle was being recovered in Europe, and was creating confusion in academic circles, a professor at the Sorbonne confessed to having gone to an Italian university, which was then the heart of the Aristotelian movement. There, he said, he unlearned what he had been teaching, in order to go back to Paris and unteach what he had previously taught. He was the prototype of many modern scholars. With respect to the present reference of qualitative distinctions to quantitative differences, which bedevils our present world view, we have much to unlearn. It is not really strange that, drunken with the heady wine of "mass production," which holds out so many flattering promises for the amelioration of the common lot, if rightfully used, we have come to overlook the qualifying phrase "if rightfully used." The tempo of modern society has been set to the tune of mass production. We have done some "unlearning" at the expense of two terrible wars, which threatened the destruction of the world's physical resources, but is it enough? Unless the moral and spiritual values can be dominantly re-established, this mass destruction may make mass production impossible for the amelioration of man's lot—materialism slain by its own hand. Under such circumstances it may not come amiss to restudy the matter of the relation that exists between quantity and quality.

Idealism and Scientific Method

The idealistic claim for the purely mental character of qualities would place them beyond the reach of scientific investigation. Since science must deal with successions in phenomena, and cannot, without becoming unscientific, enter into the question of efficient cause, such a limitation is resented by a science which seeks to set up claims to exclusive knowledge. The conflict is in great measure due to the extreme pretensions of either party. Furthermore, there is a more potent reason; phenomenal knowledge is, everywhere, a knowledge of activities rather than of essences, of measurable quantities rather than of qualities. The activities of nature are known through the manifestation of measurable force or movement. We cannot tell *what* gravitation, electricity, and light may be; we can scientifically measure their effects only in a way limited

to our five senses. There may be a universe of effects that the small range of our senses does not give us, the borders of which universe science continually strives to push back by various devices. To learn as much as possible about nature by the measurement of these activities is the special task of science. To sidetrack the researcher to metaphysical considerations is to turn him from his true field and to confuse his efforts. As the history of science demonstrates, this has too often been the allurement to which it has succumbed. It is easy to jump from scientific measurement to philosophical conclusions, as when experimenters in biology conclude that the apparent restoration of the dead vacates the claims of religion.

The protagonist of scientific method too often assumes the nonexistence of any reality which does not come within the scope of his investigation. This assurance is augmented by a blind trust in the accuracy of statistics. To the mind not logically conscious of the symbolical nature of numbers they may become fatally misleading. The field of pure mathematics itself is the only sphere wherein numbers convey exact information, and that only within their own prescribed system of relations. They are logical rather than actual realities, and in application to life become only approximations. Where factors of the living are concerned, the mathematical is frequently the least important of all facts. The stock illustration of the logics is applicable, though previously used, assuming the truth of the conclusion that if one man can dig a well in ten days, ten men can do it in one. The main points in the problem are not touched; the fact that ten men could not dig at once in so small a space, and the other, which has to do with the individual capacity and moral earnestness of the men. Even the moral element makes a difference though it cannot get into the statistics. In the law of the pulley, likewise, the numerical exactness of mathematical analysis is deceiving, since it has to be based on the assumption that pulleys are frictionless, and different allowances must be made for different pulleys and ropes. At best we can have only approximations. That many qualities are expressible in terms of quantity is an indubitable fact of experience. The relation to the high note, of the short string and the increased speed of vibration, is indisputable, as are also light waves with respect to differences in color, but since the qualitative result is affected in the sense organs of hearer and observer, the relation between quantity and quality is a concomitant rather than a causal one. An ingenious device has been perfected whereby movement of the air caused by

voice or instrument is registered in terms of light, and pitch and timbre are thus made to register themselves. This has been enthusiastically and thoughtlessly acclaimed as the "photographing" of sound. A little reflection will show that we have only a concomitance of effects made to record themselves. We have not in this instance photographed sound at all, but the effect of wave agitations striking a disk and transmitted to a pivoted illuminated mirror. The photograph is of the light reflected from the mirror. We have been able to introduce only a parallelism between the effects of sound on a disk and their effects upon the human ear. In the experiment there are doubtless some facts obtainable, but they are likely to be overestimated. We do not get any qualities of sound from our photograph. There is but little more identity between the two than might be imagined between the quality of potatoes and the bushel baskets in which they come.

Quality as Mental Construct

Whatever relation we may be able to establish between quantitative and qualitative values, our problem remains unsolved outside the realm of meaning or intelligence. Whatever else the eye and the ear get from the natural phenomena of sight and hearing, they do not get the experience of wave length and vibration. Whatever the senses get, the mind translates into meanings of its own. No terms of measurement can offer complete expression of the reality. Redness cannot be qualitatively expressed in terms of vibration frequency, nor the musical note by the arabic numerals expressive of its wave length, nor the love of a Dante in terms of the chemisms set up in his brain by the sight of Beatrice, though all these movements of matter do take place and form an interesting study. They come short of explanation.

The amazing thing about quality is not, as so often assumed, our ability to find a physical parallelism in which to express it. The amazing fact is that it represents so much more, and such a different reality, from that which its physical expression can convey. The chief values lie in the facts which cannot be scientifically reached. We could indeed go on discerning red from blue, or the note A in the musical scale, without even dreaming that colors and notes represent mathematical uniformities. This is because quantities represent diverse realms of experience, brought together through the person. The inner world of the person is the nexus in which they are joined, not some outer state of reality. Qualities cannot, therefore, be taken apart from meaning and relation. Every percep-

tion has in it at least three elements for its completion: It is, first of all, a mental act, and second, a mental act dependent upon minds existing in certain external relations, and in the third instance, it takes place only through the activity of a self-referring subject of experience. It is not mental alone, nor objective alone, but a realism of object and subject through the mediation of a person.

The trend of modern physics is toward the increasing interpretation of all qualities, including those of mass, extension, and impenetrability, as the measurable activities of atoms in which all differences are provided by variations of force. The modern atom unlike the ancient is a center of force, but is itself without extension. Mass is simply an activity to be judged by results. Thus the observer seeks the reduction of all physical manifestation to a common denominator. This concept puts in clearer light the fact that perception is a matter of relations, and emphasizes the part which interpreting mind must take in any reality. Some have long held to the reality of everything but mind, yet while they have denied mind, they have boasted a practical omniscience against all comers. The new concepts open the way to a better understanding and collaboration between science and philosophy and between science and religion. Each can provide, in its own field, contributions to human understanding that no one of them can provide alone.

Quantitative Aspects Relational, Not Causal

What is to be assumed respecting the mysterious relation between quantitative difference and qualitative change? Since the days of Democritus the two have been thought identical and yet the identification is unconvincing. Why is the mind unconvinced in the face of such authoritative announcements? The reason seems to lie principally in the fact just mentioned, that we are directly conscious of the qualities, and not of the attendant quantitative factors. We cannot by ukase reduce the intellectual puzzle of a jump from quantitative fact to qualitative interpretation. The mind is correct in this feeling. We can cross the gap only through a higher synthesis. If quantitative forces are to be held as grounding the qualitative fact, these so-called "events" of atomic action, showing purpose and direction, must be guided by an intelligence which, because of its self-consciousness and self-direction, is a Person. The same intelligent ground can be conceived as working both in objective nature and in subjective personality. In the final analysis our world can be held logically intelligible, and the deadlock between quantitative fact and qualitative interpretation cleared away, only

by assuming a Personal Intelligence as the source of their manifestation: The uniformities of nature are then compatible with contingency, since they are due to intelligent willing on the part of the World Ground and not to some inevitable necessity. The ancient conflict between the monism of matter and the monism of the Absolute is likewise solved by the only means possible. In the Person, the conflicting paradox of immanence and transcendence provides exactly the combination that makes personality possible, a paradox which the late John Wright Buckham would have called a contrapletion.

Quality the Higher Reality

In the epochs of human thought, history demonstrates the difficulty of keeping clear of overbearing obsessions.

The Greek naturalism, that aesthetic sensitiveness to nature which was the source of their unparalleled artistic accomplishment, ran to an excess that soon imperiled the culture it had built. Something similar happened in respect to Gothic architecture and the ideas it so nobly embodied. Assuming themselves to represent the last word of completeness their creators fell afoul of advancing life. Greek culture failed because it lacked the fulfilment which a larger development of the spiritual would have given, and the Gothic, because in its other-worldliness it forgot the world of objective reality. There is a reverse shortsightedness in the thinking of our own great scientific age. As the Greeks sought in naturalism to find man's complete expression without respect to the spiritual, and medievalism sought it in a spiritualism divorced from reference to man's material good, so our age is seeking to find complete expression for itself in a materialism which ignores both the intellectual and the spiritual. Of course so general a statement cannot be easily defended, for in this world there is such an intermingling of motives that there is never a strict either/or. But positivism is clearly the obsession of our times. It failed to achieve its ambition to set itself up as a new religion, the last of its English chapels having closed some years ago, according to news reports, but it still lives in contemporary humanism. There are inherent reasons why a definition of positivism as a "new religion" is a paradox possessing the dimension of humor, but the standpoints of positivism are dominant in much modern thinking. The heart of positivism is empiricism, and the heart of positivistic empiricism is the assumption that only matter exists, that all knowledge comes through sensory stimuli, that all proof is within the field of physical measurement, that

purpose must be ruled out of nature, and that explanation is a reference to matter in motion. The apparent integrity of this thought is achieved by omission of the spiritual and even of man himself. There can be little doubt that the glory of this scientific age will in history be compared with the art of the Greek and the accomplishments of the Gothic, but it also lacks finality because of the fatal lack, the recognition of spiritual factuality. Our mastery of the forces of nature, unmoralized, constitutes a menace to the future of the race. We are now in possession of sufficient scientific knowledge to bring about world destruction. Our problem is the moralization and spiritualization of society. Our scientific obsessions have led to the common denial of most of the things worth while, that is, spiritual values. The one-sidedness is shown in most modern efforts at cosmic explanation. The origin and ongoing of the world is presumed to have been a primal accident of motion. There are many efforts at swift mental contortionism to ground a world of exquisite adaptations upon the basis of chance, but there are those who are so unreflective as to do it with a straight face and an extraordinary lack of humor. Into this asymmetry we would not have fallen but for the loss of the art of philosophic criticism. The privileged position of philosophy is to point out a coherent world view and thus to prove the friend both of science and of religion. Its office is that of mediation. This position is lost whenever it turns to a dominatingly partisan view. It has too often failed of its mission by committing itself to the exclusive reality of either matter or spirit. Outside of personalism the coherence of these contrasting aspects has been sought only by the denial of one or the other, or by a device of words, such as Spinoza's ambiguous use of the term "substance" as both material and immaterial. Whenever philosophy turns to either of these expedients it surrenders the power of critical analysis and at the same instant its mediatorial prerogative. Coherence means the taking into consideration of *all* aspects of reality. When one begins with the person he is starting at least with the one known reality where spirit and matter meet. Any other procedure is based on negation of half of reality. With all the importance of physical nature it can never be the whole story in the life of man. Spirit is also a part of nature, a fact that religion has often assisted science in overlooking. For man the better part of reality lies in the spiritual values. He can never live by bread alone. The spiritual values cannot be identified with physical sensations, as in much modern psychology, without removing their spiritual character which lies in freedom of choice. Honesty as the expression

of an organism, or as an uncontrollable impulse is reduced to so beggarly an abjectness as to become meaningless. Positivism was correct in confining the field of physical science to the facts of physical phenomena, it was wrong in declaring there was nothing else in the world to explain. The discovery of a world in which values are an important part calls for a world view that will include these higher realities. Values are established only in freedom. Even social science, which Comte declared to be the highest of the sciences, is deprived of value if grounded in a world of mechanism. It has taken a long time and bitter disillusionment, which is not yet ended for some, to relieve ourselves of the folly of thinking that we can by a simple change of environment change the moral state of man. The social state must ultimately depend upon good will, the freedom of moral choices, without which social values vanish. Yet the effort to avoid frank recognition of spiritual reality in the advancement of humanity is the daily and hourly task of many of the brightest minds of our age, a task as futile as that of Sisyphus rolling the stone. As qualities are the higher realities which the mind of man weaves out of the web of sensations, so the highest of all qualities are those produced by spiritual and moral choices. Without these there is neither value, explanation, nor the reality that matters most.

CHAPTER XXI

Idols of the Cave

IN AN ILLUSTRATION so old that reference to it appears a bit trite, Plato drew the picture of man in his relation to the world of objects, an interpretation which is still potent. Men are described as sitting in a cave with their backs to the opening, and with their only knowledge of the world coming to them through the appearance of the shadows that fall through the opening upon the wall in front of them. They must draw their conclusions and build up their world of experience out of the appearance, disappearance, and succession of the shadows which cross their field of vision. This interpretation of what they see is their world of knowledge. It would be impossible to describe to such men, in intelligible language, that other world which could be seen if only they could turn about and face the light. Should they catch a momentary glimpse of it they would consider it merely dream and illusion.

The illustration is still apt, for the world of the senses can give the wisest of us only that fragment of reality which comes through our very limited physical consciousness. We reach the "external world" only through the operation of internal mental activities. Like the dwellers in the cave we must seek within ourselves even the criteria of judgment about the external world. Should we be suddenly endowed with a sixth sense, such as television might some day develop into, or be conceived as becoming, it might change very completely the meaning of the world and of experience. We go on interpreting the meaning of the shadows that fall across the wall of sensation, but our world is built by us out of these inner experiences. No world of knowledge, scientific, psychological, or religious, is exempt from these conditions, a fact to be held steadfastly in mind when we are inclined to weigh evidences invidiously. Once we have found a word expressive of any experience, we fall upon that as if it were identical with the fact, and itself sufficiently explanatory. Thus the revival of contemporary logic under the guise of semantics, desirable in itself, threatens us with a new worship of words just as we have been getting rid of old slaveries to words that had lost their meanings with the march of time and the progress or regress of thought. When we have captured a word, we begin to externalize it as experience, and the

word is taken as the token of a solid and substantial world of objects which exists independent not only of the experiencer but of all experiences. The fact remains, nevertheless, that all we know of an outer world is that which finds existence within us. Some of these objectivities which we set up are as certain to be illusory idols of the cave as it is certain that aberrations of the human mind are possible. The greatest realities of our world of fact have to be taken on faith, and many of them are made realities by our faith. In spite of all the watchdog methods, by which science has sought freedom from misleading dogmas of this kind, a simple reference to once generally accepted "facts," such as corpuscles, particles, animal spirits, magnetism, cholers, phlegms and many others, presents convincing evidence of this idolatry of words. A word saves so much thought, and so easily substitutes for explanation. Even now physics is in process of discarding some of its old-time certainties such as material atoms, gravitation as formerly conceived, continuous force, ether, indestructible matter, the second law of thermodynamics, to mention only a few. Theology with slower pace clings idolatrously to old watchwords that have become utterly meaningless to the rising generation, in spite of much pump work and iteration. Once men have enslaved themselves to words that are given objectivity by common credence, it is all but impossible to get them to believe in any other world than the illusory world of outgrown concepts. The idols of the cave become the ready instruments by which those who have an ax to grind are able to enslave their fellows, and it makes little difference which are the words they utter. Even the best of words have been thus degraded to selfish uses. So we are stormed into terror by pronouncements of Nazism, Fascism, Communism, Socialism, Capitalism, Technocracy, Democracy, Constitutionalism, Racial Superiority, Orthodoxy, Liberalism, or what have you. We get jitters from words, and it is to the personal advantage of some of the brethren to see that some of them are called out with a sufficiently alarming frequency. During the Middle Ages the Devil became so objectified that even a shackle-breaking reformer like Luther, who feared the face of no man, was frightened at his own shadow, and could discover a thing of hoofs, horns, and tail lurking just around the corner. Many others were granted personal interviews and glimpses of the same party. Let none of the congregation arise in indignation to say that we do not believe in the Devil. We do, but we believe that most of his believers look for him in the wrong places. The illusion of an external Devil makes men oblivious to his presence in their own hearts

where he dwells, if anywhere. Many of our most orthodox or most heterodox certainties fall under this category, and enslave us to idols of the cave which our own minds have set up.

It has been quite the fashion to consider one realm of human thought entirely free from illusions of this kind, the realm of science, and one method capable of overcoming the world, the flesh, and the Devil, scientific method. Yet nowhere outside the reign of theology have we had a blinder worship of words. Of the idols thus set up, science is now becoming happily aware through the demonstrated inadequacy of its own methods, and out of these discrepancies has grown the modern scientific revolution.

There is no place perhaps, where this is more evident than in the theory of causation. A few short years ago no dogma was more indubitably held than that of mechanical causation. There is still an obstinate adherence to the old certainty on the part of some, because as in orthodoxy, there seemed no place to go. The main line of defense is broken, however, and outstanding physicists are admitting the inadequacy of causal explanation from the standpoint of materialism. Such a confession brings into new importance a study of the field of causality with respect to the creative causation of the person, which is the only efficient kind of which we have direct and immediate knowledge.

The Source of the Causal Notion

Why should the human mind be obsessed with the notion of causation when its definition is so obscure and the problem it presents so perplexing. Many physicists today are denying it altogether. Yet there is no idea more universal than that of cause, unless it be that of the reality of self-consciousness itself. The commonness of the idea arises of course from the experience of the individual of the relation between his wish and his act. However much psychologists may deny freedom, it will continue to be the commonest of human beliefs and experiences. Introspection discloses to the average man the will behind the act, and in the case of the activities of others it is but natural to assume the existence of a similar causal will. When we look at the larger world of activity it is the easiest possible conclusion to assume that there too is a causal agent. There is no need to presume the superstitions of ghosts, magic, ginn, and phantom to account for this positing of cause behind action. With the unlettered, all movement is attributed to life. Even the erudite cannot escape the conclusion that purposive activity calls for an agent.

Causation as Succession

Causation is generally understood in the sense of metaphysical or efficient cause, but is commonly applied in the case of any series of temporal succession. If we have a series like a_1, a_2, . . . a_n, a is commonly called the cause of a_1; a_1 of a_2, and so throughout the series. There are two aspects under which the series may be viewed: we may think of a_1 as a variation of a, and so on down the line. We shall then have in mind the temporal succession in which the differentiated a's follow one another, but it is clear that we have not set our minds on the differentiations themselves. We have been considering likenesses only, as if primarily we had only differentiations of a continuum a, while any change in a creates a new unit and a different one. Our continuum a is a projection of our own self-conscious continuum—an idol of the cave when applied to objects. This blindness underlies the fallacy of much evolutionary assumption. If we are to think in terms of efficient or real cause, we must turn our attention not to the similarities, but to the differences, which have to be accounted for. We have bolstered our evolutionary argument by pointing to similarities as the explanation of the differences. Once we turn our attention to the differences we shall see that in each instance a new factor enters the situation which has not existed before, and these new factors are represented in the sub-1, sub-2 . . . to the sub-n of the series. In the series a_1; a_2 . . . a_n if we draw a line to separate the common factor from the incremental ones, thus $\frac{a \cdot\cdot a \cdot\cdot\cdot a}{1 \quad 2 \quad n}$ we find ourselves entirely dependent for the increment of evaluation upon the series below the line which are disparate. It is these new elements which call for explanation and which are necessary for change and essential to evolution. What we really have is a double order of causation, the temporal or phenomenal one, and the causal or efficient one. There is always a tendency to confuse the two, but the unraveling of the problem of causation can never be made so long as we fail to distinguish between the two orders. There might be, for instance, a continuing cause behind the whole series of "subs," bringing them into being one by one. If a watchmaker produces a series of watches with growing complexities and refinements it is no real explanation to declare that watch number two was produced by watch number one, although number one may have been necessary to an experimenting watchmaker before number two could come into being. The watchmaker remains the efficient cause of the series of watches that come from his hands, and the evolution is not because of the watch but because of the creative genius of transcendent persons.

Causation as Description

Another fallacy to be faced is the notion that causation is accounted for by a description of the process. There is no reason why any mature mind should make such a mistake, but we find description frequently set forth in sober scientific treatises as meeting the demands of causal explanation. This is the fallacy present when the "cause" is referred to the "law" in the case. Laws are uniformities of action, and tell us what we may reasonably anticipate, but not what is necessitated. The bending orbit of the earth is sometimes said to be caused by the *law* of gravitation, the hooks on the acacia seed are said to be caused by a gene in the chromosomes. There is ordinarily no recognition of the fact that such statements merely name the order of temporal succession, begging the question and offering no real explanation at all. However intricate the description of the process becomes, it gives no clue of explanation, except that of showing a marvelous coordination of part to function, of living cell to the world for which it is both prepared and preparing. To the mind of the poet, the philosopher, the prophet, and the man of scientific insight, this indicates a Directive Intelligence in, and behind, and through the whole order of reality. Unhappily such an insight is still a scandal to many scientific campfollowers, and to those philosophical materialists who bring up the rear but seem never able to catch up with the van of the scientific procession. Gravitation is usually "explained" in a similar manner, by description. We are given such formulas as $v=gt$, and are then told: "there you have it." But even if one goes on to say that gravitation is the uniform attraction of bodies, relative to mass, time, and distance, however verbosely or in whatever tautologies we involve ourselves, we have said nothing explanatory. We have only stated a fact. Causal explanation, which we can never scientifically reach, would tell us *why* bodies must of necessity attract each other according to mass, time, and distance, or *why* genes control the physical features of the future adults of the species, frequently appearing after having skipped many generations. Here is a puzzle before which the mind of greatest insight must fail, and perhaps in resource to the highest wisdom can only say: "Thy ways O Lord are past finding out!"

Cause as Relation

Any definition of causation will be incomplete if it does not include the temporal and spatial relations under which all developing things exist, for cause like change is of the very essence of time. As in change, it is a relation that exists between what has

been, what now is, and what shall be. Such a process is without meaning except to an abiding, self-referring intelligence which experiences and yet transcends the temporal process, and out of its experience weaves the meaning of relation. These temporal relations surviving the succession of appearances could be nothing except for a transcending intelligence, human or divine. To make causation something independent of such intelligence is to destroy the concept of causation altogether.

As causation cannot be considered apart from its temporal relations, so also must it be seen as a part of the larger scheme of relations we call the universe. To be complete, these relations must include the biological, the social, the mental, and the spiritual, as well as physical, realities. The time is at hand when we should forsake the positivistic folly of compartment reality which seeks to hang explanation on a single and less important peg. The world of matter, wonderful as it is, is not the most wonderful fact of existence. More and more clearly it appears that we cannot afford to ignore the factuality, the importance, and the explanatory function of human values in a comprehension of the universe. We should look at our world squarely and not endeavor to squint half of it out of the angle of vision, in order to save the dogma of materialism. Human values include the factualities of greatest moment to us, without which all explanations are worthless. This one-sidedness arrays science and religion in opposing camps, bringing no end of confusion to both realms. In a rational universe one set of truths cannot be held as canceling another set. A one-eyed man can never see correctly for lack of perspective. What we need most is depth of insight in dealing with the world of meaning, and depth there cannot be unless we include in our vision the whole scheme of relations, physical, temporal, biological, social, mental, and spiritual. All are parts of what we call our universe, all are related to the rest, and all are needing to be accounted for. Our boasted era of enlightenment will sometime be seen as a period approaching mental, or will it be moral, idiocy in an attempt to treat the world of reality as made up of unrelated compartments.

Causation Must Be Efficient

Stringing out the biological series in an ascending or descending order with the smallest of discernible gaps between, may provide a tentative hypothesis as to the order of succession in time, but can *prove* no *efficient* relation between the members of the series. Then it may be asked: If there is no efficient causal relation to be assumed,

what may we scientifically conclude? What is thinkable? It is exactly because at present no other scheme than an evolutionary one is thinkable that I join hands in belief with my scientific friends, although some of them seem to be weakening on the evolutionary hypothesis at the moment. There is a difference between a reasonable belief and a demonstration. We should not, on the basis of what is still hypothesis, proceed to dogmatic conclusions. One might as well string out the museum watches of the Louvre in the order of their "primitiveness" and declare that the largest and crudest of the lot produced all the rest, a father of the last little jewel, as complete as any there, which once hung as a pendant about milady's neck. The thoughtful man will be conscious of an inadequacy in thus accounting for a growing order of complexity and adaptation which has raised itself up out of chaos into order, adaptability, and intelligence, without the aid of intelligence either inside or outside the process. One fact is certain: If we have an effect, the cause must have been adequate to its production. Nonintelligence cannot consistently be held to have produced the intelligible.

Causation Must Be Purposive

It becomes clear that no teleological or purposive elements can fairly be overlooked if they are present. If there is increasing complexity working toward improvement, in the direction of the preservation or progress of the species, this fact in itself is as important as any that might be called merely biological, or merely physical. We must get into our survey *all* the facts even if their significance is not wholly materialistic. One-sided final conclusions, such as ignore all nonmaterial facts and factors, cannot be said to be truly scientific. Without the efficient and purposive aspects, the notion of causation loses reality and meaning and becomes a mere rearrangement of atoms as innocuous for explanation as the dumping of bricks from a workman's hod. The appreciation of this fact is what leads our most advanced scientists to give over the doctrine of causation as falling outside their field.

If causation is then to be efficient it must be purposive and if purposive it must be personal, for causation demands the introduction into the phenomenal series of the new, the unique, the continuous. Without this there are only redistributions, recombinations of the old, just as some materialists would have us believe But this is to ignore not only the problem of causation, but the problem of reality itself in its important phases. Recombinations are one thing, but recombinations to an end are quite another. Have we then any ex-

ample of the new in experience, or of the materially unaccountable? There is one privileged place where we find it springing forth—in the depths of personal consciousness. In every creative effort of man there are present powers for which neither heredity, environment, nor external impulses can fully account. The case for behaviorism can be made out only by ignoring the important factors in human action. Genius, in the last analysis, is unaccountable except as the act of a free person. Human choices produce not only new combinations of material things, they produce what in value and meaning are essentially new, because of the entrance of nonmaterial factors of thought and inspiration. The immaterial is acting on the material in the commonest human acts releasing new causal series. You cannot lift a book from the table by an act of will without calling into play the activity of the nonmaterial upon the material. Though you are told with much show of academic palaver that external impulses over which you had no control had determined for all time that at this moment you should be compelled to pick up this book, you know it is not true, by the most direct knowledge possible to man. The picking up of the book is, if you please, an example of uncaused cause. We witness in the acts of the person not only the uncaused cause, but likewise the only example of real cause of which we can have immediate knowledge. When we have traced causation to a personal will there is neither need nor possibility of going farther. Granted all the influences of heredity, environment, and impulse, the deciding factor, as we know, is personal decision. While it is rather common in modern psychology to deny this, it cannot be denied without unsettling, if accepted, the foundations of the social order, and the abrogation of the human values. The denial is made, moreover, without scientific warrant, and upon the say-so of an undemonstrable psychology. Any psychology which begins by such a denial of selfhood immediately demonstrates its own self-betrayal. If we recognize, as the saner portions of society do, the fact of freedom, the causal series ends in the person, and provides against the resort to an infinite regress of causes, for at long last the whole cosmic series may be conceived as begun in a Supreme Person. The finite person contains within himself the capacity for creative causation, even though he must work under the limitations of an order which he himself did not create.

When we come to the larger question of the causation of the cosmic order we have two alternatives. We can assume that a Personal Cause initiates and continues the whole series of universal activities, or we can assert that these proceed from a nonintelligent, non-

purposive chaos, down which we must pass by a regress approaching infinity to an eventual Unknowable. About such a process two facts should be noted. If that Unknowable, hunted to its lair, is to be deemed causally adequate to produce the effects of an intelligible and coordinated world, it must contain within itself both intelligence and purpose. Thus we find our discarded personal God back in the saddle, but with a new name—the Great Unknowable. But to commit everything to the Unknowable is to put an end to science before it begins, by asserting a universal skepticism: that nothing can be known about reality. The other fact to be faced, if we refuse to trace causation to a Supreme Person, is that we are forced to the assumption of efficient and purposive causation in ourselves alone. In that case we are the only gods, in a world in which we are most of the time so helpless. Even the most unthinking should sense the preposterous character of such a conclusion which is that of existentialism. The rational, and the modern, scientific assumption is that in a coordinated and intelligible world, causation proceeds from a purposive and intelligent source.[1] Such a conclusion is equivalent to the theistic claim of a Personal World Ground, and it will remain for an increasing number the most reasonable explanation of the problem of causation.

Why, someone asks, this incredible externalization of inner experience, which results in assigning arbitrary domination to a single idea like that of causation? This seems especially strange when the outstanding example of causation from which the whole concept is drawn is a direct and inner experience like the carrying out of my decision to lift the book from the table. Why do we put the fact of causation outside ourselves so readily while denying the fact within, and inventing a behavioristic psychology to quiet our inner remonstrances? Perhaps an inadequate, but most immediately occurring, answer would be that by the assumptions of behaviorism we seem absolved of troublesome moral and spiritual responsibilities. It is for something like this that we erect the various idols of our cave and then fall down to worship them. J Allen Boone, in a recent scintillating book already mentioned[2] calls attention to this fact and illustrates it in a homely but telling way. The illustration cites the instance of a bug crawling across a sheet of paper, and around which with a pen is drawn a line. The bug tries repeatedly to escape the circle but at every turn comes smack up against the line which it evidently considers impassable. Most

[1] Planck: *The Philosophy of Physics*. Norton, N. Y., pp. 31, 43, 78-82.

[2] *You Are the Adventure*. Prentice-Hall, N. Y., p. 85.

of us are not only shut in by ideas which we consider impassable, but unlike the bug we do not often try to escape. We love to be confined by the imaginary walls of prejudice, preconceived and safe opinions, assumptions of class, educational, or even ancestral superiority, dogmas of science, politics, or religion. As one good, very good, bishop remarked: "I do not wish to read your journal, for my opinions were made long ago, and I do not wish to have them disturbed by thinking." We grasp a little aspect of life as if it were the whole of cosmic meaning. So our opinion, our party, our church comes to usurp the whole area of our thought by which all else is brought to judgment. Woe be to him who invades the sacred precincts of our idols with a new and contrasting idea. He will find a guard there as forbidding as the one before the Jade Buddha in Peking who outlawed my camera. We pull about ourselves the little line of social or other exclusion, not realizing that we are not only shutting others out but shutting ourselves in and away from entering the larger world of thought and opportunity which would mean freedom and life. We love our chains. An American army officer asked, in London, for a fried egg, "turned," and was answered that it could not be done. When he remonstrated with the waiter, describing to him the simple process, and inquired why it was impossible, he received the conclusive reply: "It never has been done here, sir." The bug could not get over the line.

The inertia of the human mind checks the spirit of free inquiry because the average man resents the task involved in the consideration of new ideas, new duties, and above all, of new obligations. Resentment is intensified if the new ideas make social, moral, or religious demands. He is indeed very prone to consider any suggestions which call for readjustment or moral courage as scandalous in the extreme. He can also find an opprobrious word for it. Thus we surround ourselves with the idols of the cave in preference to viewing events in the full light of scientific, mental, or religious factuality.

CHAPTER XXII

Unemergent Evolution

ECHOINGS AND RE-ECHOINGS of the Scopes trial! Will they never die away? The author stepped into St. Margaret's Westminster, London, for a taste of "the bread of life" and received a stone aimed at American ignorance which was assumed to be both colossal and characteristic. The noted preacher of the day desirous of showing his scientific knowledge and sympathies explained evolution simply, and on a level with his hearers, by describing the case of a precocious fish which was too smart for its tail, and decided to gather to itself legs and go ashore, thus reversing the ancient scripture about adding cubits to the stature by taking thought. Recently into my hands for review has come a book by a revered scientific friend, dealing with the Tennesseeans, and showing himself still smarting from the abrasions of that scriptural-oratorical lawsuit. The fault in the case seems to have been about evenly distributed. In one party it was due to a feeling that truths of fact can confute truths of religion (the darkest of unbelief), and in the other party, a weakness of undigested learning to attempt the upsetting of religious faith in the interest of appearing sophisticated.[1] Strangely enough this tempest in a teacup came at the very moment when advanced leaders in science were dropping the doctrine of evolution as an uncomfortably hot potato. This they have done in the realization that while it contained elements of reason as a hypothesis, and might truly answer as a rough description, it was quite inadequate as a scientific account of the intricate processes which had been brought into being. The situation was full of embarrassment for everyone except Mr. Bryan and Mr. Darrow who seem to have had a good time without embarrassment. The incongruity lay in Mr. Bryan's opposing, in the interest of religion, evolutionism, the most potent argument for a Supreme Mind, and Mr. Darrow defending in the interest of science a theory already rejected by advanced scientists. The religious masses had already generally accommodated themselves to the acceptance of the theory as "proved,"

[1]See Sir J. Arthur Thompson's statement in *Science and Religion*, Scribner's, N.Y., p. 30, that this was a justifiable recoil from a crudely expressed evolutionism.

and felt ashamed to have the issue raised. For the scientific world it resurrected a dead issue which called for a defense that science had no stomach to make. It had in the meantime become apparent to intelligent parties that neither "natural selection" nor "survival of the fittest," which had been depended upon to do the trick, could of themselves be held adequate for the explanation of the progress of the species. It is indeed true that there seems no reasonable way of holding to the doctrine except by the theistic assumption of a Supreme Creative Energy, both self-conscious and self-directive. This fact is now rather generally accepted, and provides all the scientific warrant needed by religion. The outbreak, on the whole, savored of backwoodsism in the case of both parties to the dispute. It is no more the part of science to go out of its field to conclude that the orderly processes of nature, because orderly, preclude the necessity of a Creative Intelligence than it was for religion to oppose scientific fact. In reality the contest was not between science and religion but rather between two opposing theologies, one of atheism and the other of fundamentalism. For that which claimed to be science to take up the cudgels in the public school against their theology was justly resented by the theologians.

The waste of time, oratory, and morale would never have taken place if the party of the scientific part had possessed an adequate consciousness of the limitations of science, or had the party of the religious part known more about the real issues of religion. The Ten Commandments and the Golden Rule as norms of human intercourse are even more surely determined than any scientific fact ever discovered. A better understanding of philosophy would have been helpful to both sides.

Evolutionary theory has been curiously misunderstood and misinterpreted. It has been generally assumed to have been broached in the interest of life and change, when really it was set up to show that nothing new under the sun could ever be—all this coming into existence was more or less illusory, due not to creative force but really always lurking under other forms. The whole universal order must lie potentially in the Cosmic Egg. The whole world with its thoughts and wars was already present in De Laplace's "orginal cell." Every human embryo was but the recapitulation of that original cell, and therefore the marvelous readaptations, the unique elements entering in were accounted for without resort to intelligence or purpose. Thus it was hoped by discovering mere physical continuity to provide for the discontinuities. This would bring the world of science into full possession of that glory which Comte had

envisioned for it, the exclusive heir of the ages, King of Kings, and Lord of Lords. But as Chestov has written:

> The great charm for humanity of the theory of evolution lies in the exclusion of the possibility of anything new, anything previously non-existent, either in the most distant past or in the most distant future.[2]

Thus we are brought face to face with the paradoxical nature of evolutionary theory, its unemergent character, which Lloyd Morgan saw needed the enforcement of "emergent" to make it carry, for Emergent Evolution can mean nothing more nor less than evolutionary evolution, a characteristic that had been lost in the shuffle of theories.

The Mechanistic Viewpoint

In a day when there is so much theorizing upon the universality of change, when change is taken as the sole permanence in nature, it comes as a shock to learn that the modern thinker is charged with the denial of change. The paradoxical claim is not so difficult to maintain, as we have already seen, if we take into account the customary analysis of the notion of change. The weakness of this analysis is inherent in the mechanistic system. Of the dominance or of the value of mechanistic theory there need be no denial. It has provided a container for the back-lying philosophy of science, which has served the purpose of keeping down inconvenient metaphysical problems while the scientist has advanced to the practical discoveries of the uniformities of nature and the means of controlling them to human uses. Even the most rigorous mechanist, however, can only keep in abeyance the deeper ontological problems though making his boasts to solve them all. Mechanism applied to the field of phenomenal causation works no particular harm; it becomes vicious only when extended to cover the realm of human choices and values, or when it enters the field of metaphysics and presumes to give an account of the nature of being.

The view of nature as mechanism rests upon two main assumptions, quite apart from the basic one that views matter in motion as an adequate description of reality. These assumptions are, first, the universality of law, as dogmatic as belief in God, and second, the continuity of force, now abrogated by up-to-date physics. The assumption of the universality of law is essential to a mastery of nature, and to a far-reaching knowledge of the external world. It is based, however, on what in proportion to the extent of its applications is a nec-

[2] *In Job's Balances.* Dent, London, p. 150.

essarily limited number of instances, covering a very limited time. Uniformities might occur in natural phenomena for ten thousand years which would not necessarily be operative for the previous or the following ten thousand. In fact something like that evidently happened in the construction of the earth and its satellite moon, which has not to any human knowledge happened since, or anywhere else in the universe. According to "universal law" as we know it, it never could have happened. Such a suggestion as this is as unsettling to science as the atheistic suggestion is to theology, but the scientific romancer needs occasionally to be brought back to facts of observation. There is good scientific reason for limiting the range of deduction. Even scientific achievement will have to be submitted to the test of known fact, and particularly that which tries to build up out of present uniformities, pictures of what the distant past must have been. Here a bone and there a fossil, with a tidal deposit, and a knowledge only of present conditions of life, sedimentation, and decay, may offer an insecure foundation for the dogmatic assertions that are often made respecting the past history of nature. Such efforts should doubtless be made, but with humility and with due reservation.

The second assumption of mechanism, that of continuity of force, is already receiving severe treatment in the house of its one-time friends. It would seem to call for the merest mention in a work on philosophy, so thorough has been its present abrogation in the field of modern physics. Suffice it to mention the general acceptance of Einstein's doctrine of relativity, Heisenberg's Principle of Uncertainty and Planck's Quantum Physics, to name but a few leading theories with respect to contingency in the laws of nature.

Out of the discussion of mechanism as a system of determinism, in which all results are produced by chance motions in atoms of uniform identity, is emerging this consciousness, that such a scheme is quite incapable of accounting for evolution. A theory which commits all qualitative changes to accelerations of movement in identical atoms may explain redistributions, though not the causes of them, but cannot show that this is the equivalent of what we know as change. Much less can it account for the changes which are necessary to the evolution of species. Any rigorous adherence to mechanistic principles commits the world to a status quo, for when it comes to providing for change, a small change is as difficult to account for as a large one. Mechanistic evolution has depended upon the fallacy that, if the difference was small enough, it accounted for itself and complete change as well. This has been the peculiar

fallacy of the past generation, for it has assumed that if the change were small in the particular instance, and spread over an indefinitely long period of time it was thereby accounted for. The real problem is, how can change occur at all? Change is committed to an infinity of vibrations during an infinitesimal time and thus a seeming identity and static quality is imagined as compatible with startling differences when they are revealed. It is the old assumption of the relation which the magician's wand is supposed to hold to the rabbit which he pulls out of the heretofore empty hat. Such assumptions, though made by men of good standing in the community, will not bear critical examination. They have flourished only in the absence of destructive and constructive philosophical criticism. Should someone suggest that evolutionary change does not involve a qualitative idea based simply on differentiations in quantity of identical particles, it would appear that change must then mean nothing else than the introduction of the new into the cosmic process. Such an assumption is contradictory to mechanistic theory. The backbone of the mechanistic contention is that what seems *new* can be only a rearrangement of what was already in existence. Here the mechanistic argument decapitates itself and commits itself to the dead and helpless state of ancient Eleaticism.

A Static World

There is, to a thoughtful mind, more than a passing resemblance between the static world of the mechanist and the ancient scheme of the Eleatics. These reduced existence to a standstill by a rigorous dialectic over the problem of infinity. Our dependence upon the mathematics of infinity for a shorthand treatment of ideas has helped to give us a false objectivation to what are merely symbols. When infinite divisibility is erected into an objective fact, rather than assumed to be a convenient mental fiction, an inch has as many spaces in it as an ell, and the meaning of space is distorted. Achilles can never overtake the tortoise, because of the infinite number of spaces conceivable between him and the object of pursuit remaining at infinity though small, and if the observer is to locate an arrow in relation to its surroundings it must be in some specific spot and therefore at rest, a flying arrow being an illusion. The modern mechanist by a like reference to infinity of movement and time hopes to ground change in the changeless, and reaps confusion rather than explanation. On such a basis, nothing can appear in the effect which has not previously existed in the cause, and if true to its principles, change is unaccountable except as illusion.

The appeal to potentiality is meaningless without a self-directing purpose. Used as it is by the mechanist it becomes but a question-begging phrase. There is no reasonable assertion of a world of change without giving a place for contingency and freedom, and contingency in nature and freedom in man can be maintained reasonably only on the basis of a Creative Person behind the process. The persistence of the mechanistic notion of explanation must be charged to the inertia of the human mind, that conservativeness of thought which leads us to cling to false ideas, once established, rather than to readjust our minds to new ones, the implications of which we do not at first apprehend. One of the characteristics of man seems to be a certain parsimony of thought. The mental poverty of mechanistic materialism has too long been covered by such ambiguous terms as "potential," "function," and "sport."

The World of Change

If there is a truth which more than any other conforms to the present mood of thought it is that of change. Ancient Heraclitanism has experienced a return to dominance in the thinking of our age. There is no fact of which we feel more certain, yet in its grasp we feel the whole world which we have known and the certainties in which we have rested, reeling beneath our feet. The modern world is demanding that all life, all activity, even the human values which seem so unchanging and eternal, shall be caught up and expressed under the form of change. If science, philosophy, and religion are to meet the demands of the present, they must consent to reinterpretations that will involve at least a new vocabulary. Men no longer believe in a static world. "Unchanging" truths are challenged to show their present applications, and this demand must be met. Social and political life are also breaking away from old forms and watchwords and seeking new expressions, demanding a life, the chief characteristics of which shall be contingency and freedom. The new mood cannot be successfully resisted but it can be directed into new expressions as valid as the old. If it were a movement against the nature of things, it might well be disregarded. Scientist, philosopher, and theologian might then return, each to his comfortable illusion of being in the possession of Absolutes and the Unchanging. But the static conception of the world becomes daily less satisfying to alert minds. Of change we are assured. We are not prepared to accept an imposition of words in the place of real explanation. Contingency in the world there must be if it is yet to evolve as we feel it must, and freedom in human

action too there must be if we are to create a brave new world, but this can come only if there is within us and behind us, working through us and through the world of events, a Creative Power which has already revealed itself partially in the processes of evolution. The progress of human thought has inevitably carried us beyond the point where we can ever again be satisfied with a static world.

Seen in its stark simplicity the unsettling problem of permanence and change springs not from the external world but from man's own nature. He is conscious of both permanence and change yet fails to observe that this continuity, this immortality, is not a characteristic of the external world but his own birthright as the child of a Creative Intelligence whose nature it is to survive all change.

CHAPTER XXIII

The "*Elan Vital*"

AT FIRST GLANCE it will seem paradoxical to charge the scientific theories of the nineteenth century with having descended from the earlier theological dialectic, so often have the theologians and the scientists been at war. Their conflict partook of the bitterness common to civil wars and family feuds. Nineteenth-century naturalism attempted to supplant the spiritualistic monism of theology with a contrasting monism of matter, but in some respects their similarities were even more significant than their differences. The opposing conclusions were not as contradictory as they seemed. Spiritualistic monism could not quite deny the existence of matter and of evil, while naturalistic monism had to call up nonmaterialistic assumptions to erect its system into intelligibility and meaning. The mental background of both opponents was similar, and so their conclusions could not be altogether disparate. If theology chose an immutable God as the source and origin of all change, it seemed only appropriate that the naturalists should choose an immutable atom to do the same trick. A new order of scientific dialectic was erected in opposition to the older order of theological dialectic. As Tennant[1] recently pointed out, in this type of atomism there could be nothing new, nothing emergent, no change save that of configuration, since all the elements of the new are required to be in existence in the first atom of all. Much of this concept rested upon the tacit assumption of the eternity of matter, which assumption received its death blow from scientific research, which clearly shows that the system of the universe had a beginning and may have an end. Objects, to the naturalist, were made up and endowed with qualities by identical atoms, changeless and enduring, from which combination of indistinguishable identities spring all the differences earth is heir to. The crux of this concept lies, however, in the contribution of man's own mind which apparently takes the facts all alike and puts into them the meaning of quality. If vibrations of light at one speed are interpreted by the human mind as purple and at another speed as yellow, the significant differences may be seen as furnished by the mind. The lure of scientific monism was that it seemed desirable as making the world dependable,

[1] *Philosophical Theology*, Cambridge University Press, Vol. I, p. 341.

logically calculable, and subject to complete comprehension by scientific method. What was not at first apparent was that a world thus construed could have neither purpose nor meaning. In this way materialistic monism prepared for its own destruction on the rocks that had wrecked theological monism; they were both opponents of life and reality. Theology's Absolute God found it difficult, or impossible, to participate in the affairs of the world he had created because considered as Absolute he was both unconditioned and unrelated. He could not even have created a world without involving himself in limitation and conditions, and could scarcely be cleared from participation in evil which in his power he declined to check. Thus, without intention, theology itself was led into a belief in the eternity of matter, a natural world forever opposed to the supernatural. It was on this concept of matter inherited from theology that Naturalism built its superstructure.

The incongruities of this situation had long been apparent, and the way to a new view had been in preparation from the beginning, but in our time it remained for the late Henri Bergson to provide the catalyst that has done much toward a new precipitate of thought. *Creative Evolution* was not the sudden announcement of new theories. It was present in Aquinas, and in modern thought had been working since the time of Descartes. A long line of thinkers—French, British, American, and German—had set it forth in varying and succinct expression, but the forerunners of personalism could not get general hearing until naturalism had run its course and proved its inadequacy to explain the world of things. The poverty of the evolutionary concept in providing a description of natural process without supplying explanation or even disclosing the secret of further progress became apparent with scientific advance and new materials of criticism. It was seen that no system could be complete which left out of account man and his creative powers—the capacity to originate new elements in the world of reality. If the appearance of man involved a long history of adaptations and readaptations to environment, the obverse of the medal must be equally true, environment was adaptive to man and subject to his creative efforts. The old dogmas, scientific and theological, that had belittled man by comparing his physical entity with the infinitude of the physical universe, had made him, on the one hand, something less than the material atom and on the other, the plaything of a Supreme Autocrat and Tyrant. The general movement in thought was contemporaneous with a groping after democracy, a democracy not of race, class, and privilege, but a democracy based

on the intrinsic worth of every human being, long sought and still imperfectly realized. In the light of modern demands we must have a concept of evolution which will include man himself with his mental and spiritual capacities. He can no longer be thought of as a mere epiphenomenon, a bit of froth, accidentally thrown up by the tossing waves of a material universe. The most certain of all facts is that man "belongs." The greatest of all certainties is not, as one physicist recently remarked, the "principle of uncertainty," but man himself. What the universe is to be depends upon him. The confirmation of this truth lies in the fact that he is the only unit or organism in the visible universe capable of comprehending its meaning. An ocean of new interpretation rushes into the old truth about the Ideal Man: "The world was made by Him, and without Him was not anything made. All that was made was life in Him." There can be no greater clue to the meaning of the material universe than that of its supreme creation, the Ideal Man. The complexities of material evolution, the grindings and scorings of glacier and volcano, the slime of ancient seas bringing forth the weird life of prehistoric ages, bear no meaning in the light of themselves alone, but only in the dawning light of the person—the God-Man, the Man become God. This is why the one historic personage found adequate to fulfil that description becomes the center of human history, the goal of evolution, the only God we know. The new theory of evolution takes on a character unknown to the old, and at the same time offers a principle of explanation which was patently wanting in the old. This principle was announced by Bergson as the *élan vital* which, taken by itself, is only another abstraction like that of Life spelled with a capital letter, until it was given a meaning by being invested with personality. An *élan vital* that has to call on duration (*durée*) to substantiate itself, is altogether impotent unless itself be an experiencing subject, binding time, past and present and future into a meaningful whole. It must reside both within and above the process which it directs toward ends in view. It was at this larger truth that Bergson arrived in his last great work, *The Two Sources of Morality and Religion.*[2]

The Sources of Creative Effort

Unless the coming of the person is to be seen as, in some measure, the goal of evolution, the theory becomes meaningless. If the per-

[2]The author is not unaware of the last published collections of essays, which, written previous to *The Two Sources*, appeared afterward. See author's criticism (prepared for the committee of which Bergson was chairman at the Sorbonne), published by Abingdon Press, 1920, under title *Bergson and Personal Realism.*

son, because of mental and spiritual endowments, is in any sense creative, it might well be that in the study of man's creative efforts we should find a clue to the larger creativeness which has set forth the visible universe. Such a study would have this at least in its favor, it would start with the indisputable facts of experience, and offer the only cases we know of actual creation. We shall doubtless be charged with anthropomorphism, but can endure the charge with equanimity, since all knowledge, whether of observation, or of reflection is the anthropomorphic interpretation of the human senses or of human thinking. If an *élan vital* is present in the advances of nature, seizing new powers of organization, groping into new adaptations to environment, man, being himself part and product of the natural process, may furnish the most direct example of creativeness in action. We may then well ask if there is within his consciousness anything remotely corresponding to that vital urge which in the cell we call the *élan vital*. It might be profitable to seek out this urge as it appears in man's own outstanding creative effort. Let us seek it in things that accord with genius, and where the result can be least assumed as the result of blind physical processes. The study of productive genius in science should come under purview, as well as the all but unaccountable achievements in music, painting, and art; the work of the poets and masters of literature who as producers find themselves in possession of insights and expressions they are at loss to explain. At times they feel as if under the spell of an over-soul, or over-mind, which does not indeed provide the basic material, but which organizes it within the subconscious until it breaks upon them in new and startling insights, and achievements that seem beyond their powers. The inventor is balked in his solutions, until with a flash of insight combinations and possibilities not given in the cold summation of the known come to him "out of a clear sky." The presence of this urge, *élan*, inspiration, or insight is that which characterizes creative work, and distinguishes it from the work of the copyist who in his best moments cannot seize that *rapport* with life which creates living literature or living art. It is exactly this living insight which makes the genius a spokesman to many souls, but his message is not understood through rationalization or analysis; it is the speech of insight to insight, of soul to soul, and needs only communication to make it convincing, there is no speech or language where its voice is not understood. This creative *élan* is witnessed at its highest in the martyrs, men who for the testimony of great principles and against powerful physical impulses calmly endured cross, torture,

and flame. Such men seize upon eternal values, truths, and facts, which possession enables them to become fructifying streams in the life of human endeavor. Such were Socrates and Jesus and a mighty host of those who preceded and have come after them, proclaiming in convincing language that "life is more than meat." Even the horrors and diabolisms of war are infested with the holy, when men offer their bodies for the redemption of the social order to ways and works of righteousness, truth, and deliverance. In hours of terror and danger, man finds some higher sustaining power which is not of the earth. In the act of losing all he finds himself achieving all. This urge in him is more powerful than physical stimulus, and when it accords with righteousness and the moral values, lifts him to a new plane of conscious existence. Can there be any doubt of a psychical rather than a material nature of this inspiring impulse which bears as its highest fruitage, new insights into righteousness, justice, and holiness? Epiphenomenon of matter? Maybe, but representing a higher value, validity, and factuality of its own. This is the gift of that psychic or emotional nature of man by which he overcomes the world and it goes commonly under the name of inspiration. May it not well be that the urge which moves the atom and the cell along lines themselves cannot see or understand, is nothing less than the presence dimly felt of the Supreme Creative Spirit through which all things exist? This fact has perhaps never been more powerfully set forth than by Gilbert K. Chesterton in the poem *The Holy of Holies*.[3]

Elder Father, though thine eyes
Shine with hoary mysteries,
Canst thou tell what in the heart
Of a cowslip blossom lies?
Smaller than all lives that be,
Secret as the deepest sea,
Stands a little house of seeds,
Like an elfin's granary.
Speller of the stones and weeds,
Skilled in Nature's craft and creeds,
Tell me what is in the heart
Of the smallest of the seeds.
"God Almighty, and with him
Cherubim and Seraphim
Filling all eternity—
Adonai, Elohim."

[3] *The Wild Knight, and Other Poems.* 1914. Dent, London.

In the unreflecting courses of nature this spirit can be commanding but in man it must be altogether voluntary, because in the person a new creation is being attempted, a moral and spiritual creation which can arrive only through cooperative wills that work not blindly but with understanding. If it be objected that the insights of mental or spiritual genius spring out of subconscious activities, we need to be reminded that what is in the subconscious is partly put there by willed effort, is representative of a man's moral and spiritual fulfilment, and the point at which genuine inspiration seems most achievable. The subconscious self is the place of morality, integrity, honesty, attitudes that have been so often willed that they have become instinctive, expressive of the man's real desires, and independent of the formalities and conventions of human intercourse. Here is determined what the man would really be. "Out of the heart are the issues of life." This place of dreams and aspirations may become a Holy of Holies, or it may be a veritable Hell of torture and frustration. Here God and the person meet, and the inspiration can be held due to the presence of a Divine Spirit, so that every true and noble expression and discovery of man springs from a free and voluntary cooperation with that which is in all, and over all.

If something like this can be assumed, a doctrine of evolution becomes plausible and explanatory. Nor would such a view be affected by man's failure to achieve perfection. The important accomplishment is not the perfect work but the perfecting person, on his way to supreme fulfilment. Such facts are not negated by the physical evils that persist in a world which is morally incomplete, but which travails in pain, to bring to birth the revelation of the sons of God.

Purpose and Evolution Inseparable

As Hamlet was necessary to the drama, so the tacit or open assumption of evolutionism is always progress toward an end. Even the anti-teleological evolutionists assume it at the same time they openly deny it. The only difference is that refusing a creative purpose in the beginning, they assume its later presence, sprung only from chaos and change. How accident could suddenly issue in order they do not feel it necessary to inquire. The inconsistency of ascribing to disorder and accident the explanation of order and progress toward a goal does not seem to distress the materialistic mind. The crux of the problem is hidden under the terms "natural selection," "survival of the fittest," "function," and "potentiality," and the

question-begging device escapes the unwary. Whatever scheme is erected to give plausibility to the hypothesis of evolution, the essential element of purpose can never be left out. Evolution is a progress from the simple to the complex, from crude forms to the more refined, from lower powers of adaptation to higher. The affirmation of countless differentiations and integrations is a resort to infinity, intellectual dust thrown in the air to conceal the absence of data. To the degree that materialistic evolutionism has survived, it still clings to the ancient Spencerian definition as "an integration of matter and a concomitant dissipation of motion; during which matter passes from an indefinite, incoherent homogeneity to a definite coherent heterogeneity," through countless differentiations and integrations. This stirring of the verbal soup can only come out where it went in with no new components added, but it seems to satisfy some minds. If evolution means the advance toward orderly ends, the most important fact is the increment, the introduction of new elements that constitute the progress, and the introduction of the new into the series looking toward a final result calls for a transcending purpose which can foresee however dimly the outcome.

First of all, then, it is evident that evolutionism of the mechanistic type, in affirming the accidental origin of progress, commits itself to an illogical and intellectually impossible hypothesis. The materialism of Hobbes has been taken over bodily into this type of thought, and especially that part which affirms that "all that exists is matter, and all that occurs is motion." On this ground, mechanistic evolution assumes the eternity of matter, and the contingency of motion with no way of accounting for the initial "push." Cosmic dust seems to have gotten "off balance"; how, is a matter of imagination. If we attempt to ground the original motion in causation, we are as badly off as without our theory, so we are forbidden to disclose the mechanistic absurdity by inconvenient questions. We are remanded to the Unknowable, in silence and in ignorance. In spite of much appeal to scientific ways of looking at things, we are really commanded to make of our materialism a faith, and to accept without examination the dogma that matter and motion are a sufficient explanation of everything from mountains to oceans, from the sands of the seashore to the striations by which the orchids lure the bees, and all capped by the marvel of human love. The principal reason that otherwise rational beings accept such dogmas must be due to the tendency of human minds to dwell in unconsidered assumptions. The assurance that in accepting this theory

they are "scientific" is all they ask, as in other days men leaned on doctrines for the assurance that they were orthodox. Nowhere, outside of dogma, do we find learned men citing disorder and accident as the adequate reason for order and purpose. If we sit upon a Swiss chair in the house of a friend, and at our sitting, the strains of a Beethoven symphony begin to issue therefrom, the assumption that chair, concealed music box, musician, and friend that bought the chair, were without design of any kind would do credit neither to our intelligence nor to our scientific acumen. Yet this is exactly the position of the mechanistic evolutionist who claims to be tolerant and yet hurls epithets at the incredulous for their lack of scientific faith. Fortunately he has pretty generally forsaken the laboratory for the popular magazine.

Illusions and Fallacies

The heart of the fallacy of the abstract which hides in the Spencerian formula is in the committal of the whole process to an infinity of time. It is assumed that if the unique items which must be introduced to constitute the differentiations required for the production of new species are made small enough by being spread over an *infinite* time, anything could happen, and imagination solves our problem. This solution has of course no scientific standing. It is not scientific to reduce the problem to a dust cloud, and then proclaim by fiat that somewhere in the confusion that which had no existence came into being. It is as difficult to explain one difference as a thousand, and a small gap is as unwarranted as a wide one. The problem is, how could new species spring into being, how could the unique, become? If all is under the reign of inexorable law that admits no contingency, why these differences? If we were to decide to shut one eye, and look at nature solely from the standpoint of differences, with the same obstinacy with which the mechanist cites likenesses, we could provide a science of differences, a philosophy of the irrational. Such a philosophy or science of the irrational is not impossible, as is shown by the conclusions of Nietzsche and the skeptic philosophers. We look upon the uniformities as an aid to intelligibility, to make changes appear rational Since we must call in intelligibility somewhere, why not assume its existence as the heart and core of evolutionary process? A mechanistic universe is a contradiction to evolutionary hypothesis which can never be gotten over. An essential knowledge cannot be grounded in an essential skepticism without disaster to intelligence. This is not to overlook the essential values of skepticism. The work

of Hume, who by the fires of skeptical inquiry cleared the ground of the unessential, prepared the way for Kant's assertion of the reality of values. But skepticism cannot stand by itself alone and yield important results. More and more, even in the seeming divergences of nature we are discovering laws or uniformities of deviation which bring into perspective the fact of a contingency based on purpose. The teleological factor, in spite of all that has been done to deny and cast it out, is increasingly shown to be fundamental to the assumption of the evolutionary hypothesis.

The Immanent Purpose

Toward the grounding of evolution upon the presence within or behind the process, of intelligent purpose, there are certain confirmatory facts of experience. It would seem unscientific to omit these facts in the interest of a preconceived hypothesis like that of mechanistic evolution, but that has been done times without number. One of the most important confirmations of the presence of purpose in the advancement of species must be held to lie in the fact that whenever in known history we have witnessed such an advance in a desired direction, it has been the result of intelligent cooperation with the forces of nature. Wherever we have had in general an improvement in a desired direction, in dogs, horses, or pigeons, it has not been due to the accidents of "natural selection," but to careful, intelligent, and purposive selection. If this intelligent and purposive selection is removed, the points gained are quickly lost and the species slumps back to the mongrel type. The dog fancier understands the importance of this fact. The difficulty of bringing about improvement of species is illustrated in the laborious scientific work required to produce the loganberry and other multiform creations of Burbank and his associates. These results disclose the reasonableness of assuming that intelligible progress calls for the factor of intelligence in or above the process. At least most of the evidence we have is on that side. The significance of this fact is emphasized when we consider the nullifying character of natural selection. Wherever it has been observed, its one characteristic seems to be that it is oblivious to improvement. Nor are we helped by calling attention to the observed existence of "sports," and pinning our hopes on the accidental in that phase of biology, for the "sports" so far as at present known have not often taken the direction of progress. Sports, for instance, in the anthropoid apes seem never to take the direction of man.

A similar fate attends the other pillar of mechanistic evolution, "the survival of the fittest" as an explanation of the progress of species. In spite of the fact that the whole notion is vacated when we call attention to the fact that the problem cannot be the "survival" but the "arrival" of the fittest, we shall proceed, as if the former might be a legitimate concept. In an evolution which puts man and his intelligence and moral achievement as the highly desired and desirable climax of the process, it is impossible with any reasonableness to leave out of the definition of "fitness" the moral and spiritual elements, to say nothing of the mental. If man is the most fit climax of evolution we must include the appearance of moral character. Where in our World-Ground are we to find any cause for this most highly valuable evolution of all? The appearance of moral fitness cannot be explained, and can only be ignored or denied by the mechanist. There are individuals with a sufficient fortitude to deny the existence of free will, and of morals, and still to depend upon the moral beliefs of a self-respecting society to make life possible for them. If we allow our definition of fitness to include the moral element, and we must do this if we are to admit man with his values as a part of the scheme of things, we have let loose the fatal genii so hateful to the mechanist, the presence of moral purpose in evolution. An evolution which provides for growing moral achievement can be explained only by referring it to a creative intelligence, of which moral purpose is the chief and abiding characteristic. And too, this admission, so fatal to mechanism, is borne out by the experience of life. The advance of time has been marked by the decline of those forms of life which by reason of strength and combativeness were best fitted to survive. The saber-toothed tiger must have been a beautifully terrible product of a world in which violence was desirable, but a world headed for values soon became too small for him and he perished, while the patient and helpless sheep survived. Obviously any definition of fitness must take into account the matter of value to the whole of life, for even in the kingdom of man it is decreed that "he that taketh the sword [the aggressor] shall perish by the sword." If survival of the fittest is to take on cogent meaning, it must include the character of value for a social world, and so participate in moral achievement.

In our effort after an adequate conception of evolution we must give further consideration to the problem of the appearance of the new or unique, necessary to progress, and which cannot be accounted for by pointing to a past which did not contain it. It is customary, for instance, to point to the anthropoid ape, which it

may be reluctantly admitted is conspicuously lacking in some of the characteristics of man, and looking on all the likenesses, to exclaim: "from such, or from an even cruder common ancestor, came man." Far be it from us to deny the possibility. But this is no explanation for those characteristics appearing in man which have no place in his simian ancestry if such is granted. Wonderful as the similarities are, we must call attention to the fact that it is the dissimilarities that are up for explanation. We must not assume, without evidence, what we are to prove. To point to the likenesses and overlook the unlikenesses, and then to declare that the one accounts for the other, may be clever but it is neither scientific nor explanatory. It is a truism that the cause must be adequate for the effect, but this truism is axiomatic to all intelligence.

There are two possible ways of accounting for the appearance of the new or higher form. We can say that it is accidental, as a "sport," brought forth by environment and circumstance, or we can ascribe it to purpose either within or without the organism. There is grave question whether a "sport" can secure its place within lawful uniformity. Much more needs to be done before this point can be cleared. If, however, it is found that the "sport" can find footing and maintain itself under the reign of law, that ability would furnish one of the strongest arguments against its being accidental. If we have the purely accidental, the connection and uniformity demanded by the "descent of species" is invalidated. The only intelligible explanation is that the appearance of the unique in a way to forward evolution is grounded in intelligent purpose which oversees the whole process, understands where it is going as well as feeling it is "on the way."

Under the stress of scientific discovery, the highly hypothetical nature of the claims of evolution becomes more apparent. We arrange the vestigia of the past in an ascending order, according to our own concept of ascent. Such an order does conform with the appearance of the varying species on the earth. We can prove they succeeded each other. We cannot prove that one form created another. It is reasonable to assume that one form developed out of its preceding form, but such an assumption is reasonable only on condition of the presence within organisms of an immanent intelligence and purpose which could more or less foresee the end from the beginning and work toward it. Comparison of skeletal and blood similarities between man and the anthropoid apes proves only that in these respects they are similar, but it does establish the possibility of a theistically grounded evolution, no more.

The Appeal to Similarity

The purpose of evolutionary hypothesis is to set up an order of uniformity, of causal sequence, by which to offset the fact of continuous change and give us a permanence upon which we can rely. Such an assumption is necessary to progress in science and opposes the ancient notion of chaotic, accidental, or miraculous creation. As Tennant[4] has been at pains to show, in science a rational world is one in which the constituents are immutable individuals such as atoms which, all alike, ground all the differences. Held to its premises, such a world could be nothing less than static, unchanging and meaningless, a world of "unreason." Reasonableness in the cosmic order can be achieved only by assuming in the causal explanation the existence of an intelligence which is the source of a rational world, as the first and final member of the evolutionary process. The essential relation between the evolutionary and the theistic hypotheses will some day be more generally apparent. To some the connection, and its assistance to theism, is all too apparent and there are plentiful signs of the abandonment of the theory of evolution by its former advocates. As Sir James Jeans[5] suggests, under the new concepts of space and time the theory may come to lose all meaning.

Let us return for a moment to a consideration of the significance of similarities of physical structure between men and the higher animals. Is the demonstration of similarities an explanation of the appearance of higher qualities in man? As has already been suggested, the fact calling for explanation is the arrival of differences. The main difference between man and the animals is not one of skeletal structure, nor is it even one of skull capacity, from which such sweeping conclusions are customarily drawn. The striking difference is mental and spiritual. Man differs from the animal mainly in his capacity to reflect upon his own consciousness, to weigh his own thoughts, to enter into judgment with his own mental life. Through this door enters his sense of moral responsibility, his power to construct and assign meanings to language, his social and political organizations founded on the freedom of the individual, and finally the longing for moral perfection, spiritual self-expression, and unity with the spirit of the universe, which we call religion. These are powers built up within the human personality alone and are in very small part a gift of his physical heritage. The infant is provided with capacity for moral evolution,

[4] *Op. cit.*, Vol. I, p. 341f.n.

[5] *The New Background of Science*, Macmillan, N. Y., p. 107. See also Bertrand Russell: *Scientific Method in Philosophy*, Open Court, N. Y., p 11.

but this latter comes by way of voluntary and understanding responses, by which he adjusts himself for good or ill to his environment, civilization, and culture. Presence or absence of the reflective mind must be held the line of demarcation between animal and man.

Transmitting Acquired Characters

We can scarcely consider the relative values of a theistic evolution as contrasted with the mechanistic theory, without reference to what from the scientific standpoint is the most important of all facts sustaining or negating the theory. The field of mechanistic claims is being vacated by the growing evidence that the transmissibility of acquired characters cannot in any case be verified. Yet in the face of this reversal of the Lamarckian theory, the die-hards continue to assume it. Aroused by the feeling that the mechanistic theory must be saved at all costs, some protagonists attempt to make up for lack of facts with vociferation and verbal ferocity. The supposed facts they adduce are sporadic and unconvincing. Countless experiments fail to bear out their contention. The main drift of evidence is against them, and the position may be said to have been abandoned long since by the leaders in science. Races that have practiced self-mutilation for millennia continue to produce true to the original and unmutilated type. The only hope seems to lie in an attack upon the germ cell itself by some such means as cosmic rays. Any connection of development which lay within the organism, sufficient to ground the evolutionary theory, was dependent upon the transmissibility of the gains made by a definite individual in the progress of its life. Of such an instance we as yet have perhaps no clear example. The scientist has shown the hollowness of the mechanistic theory. The Dwight Professor of Anatomy at Harvard recently called attention to the fact that while among the ignorant the theory of evolution was holding increasing attention, it was held by scientists to be both unproved and impossible.[6] The doctrine, if it is to remain, must join the region of great faiths, and it must be bolstered with the assumptions of theism.

The "Elan"

The result may be disconcerting to science and disappointing to theists, for even from the theistic standpoint evolution cannot be demonstrated as more than a reasonable assumption. This assump-

[6] See the interesting article by T. H. Morgan, *Yale Review*, July, 1924: "Are Acquired Characters Inherited?"

tion science is, in the nature of its charter—the scientific method—powerless to make, for to make it is to pass out of the realm of demonstration into that of philosophy, or even of theology. This situation will doubtless be humiliating to that type of scientist who has claimed to annex the whole field of knowledge. To other scientists it will be a relief from charges of hostility to religion. Comte laid at the feet of science the crown of autocratic authority, triumphantly and contemptuously relegating both philosophy and religion to the scrapheap of time. He invested science with a scepter she was incapable of wielding. He rested the delimitation of the field of science upon the observance of physical phenomena and assumed all knowledge to be thus verifiable. Once science has accepted this delimitation it must stand by it. There is no way to recross the border to resume command outside its own field.

For the theist the existence of God though rationally justified, and personally experienceable within the depths of the subconscious, must remain scientifically undemonstrable. God can be known only through an act of inner experience, an act of faith, an act of religion. Faith is of the very essence of religion. To supply religion with scientific or phenomenal demonstration would be to destroy it. Even human friendship or love is a plant of like fragile growth. There cannot be love without faith, and any evidence of unbelief destroys it at the roots. The exercise of religion is a living dependence upon the factuality of things which having not seen we love. Only in such a faith can true personality and religion be achieved. Belief in God is a human value, and these are not known by material measurements or experiments in the laboratory, but by life alone, a living realism. Yet these values are the ones that give meaning and moment to life, and confer dignity and worth upon the supporting physical order. Science can show by her clear light, the reasonableness of the theistic assumption, as philosophy can show that it is not inherently illogical, but to religion is committed the task of affirming the existence of God by the right of immediate experience as a human value and a fulfilment of the needs of man.

It is a task which might well be considered beyond human powers to suggest the possible relationships between the ultimate *élan* or the Creative Intelligence, or Person, and the order of evolution. But these days which have brought the new theory of the atom to the fore offer tempting suggestions. Shall it be by the adoption of a new terminology, such as suggested by Berman[1] in "psychergia," or "personality value"? Whatever term we use for

[1] *Behind the Universe*, "A Doctor's Religion." Harper, N. Y.

this enduring urge that works in and through atom and cell bringing in the advances of evolution, it must be openly or secretly given the force and characteristics of personality as transcending the process as well as possessing purpose, self-consciousness, and self-direction. These are just the qualities required for a personal God. Suppose all objectivity is, as some modern physicists assert, only the manifestation of force; the atom an event in a space-time continuum; a center of activity from which we get our impressions of material extension and the other qualities of phenomena. The objective world might then be seen as the result of continuously created uniformities springing from a Supreme Will. Natural law would appear to be the rational uniformity of such a Supreme Mind working toward final results. The uniformity would not make contingency appear impossible, for both uniformity and contingency would depend upon the rational will of the Supreme. When that Will should for the good of the order see fit to set the urge toward the development of new species, the appearance of the new could be rationally defended by its place in the evolving order. Nor need the thought of an immaterial will acting upon a material order too much disturb us, for such a connection is witnessed by us every day of our lives. The mysterious relation that exists between immaterial willing and the muscular raising of the hand is equally beyond the powers of scientific explanation, bravely as the behaviorists attempt to explain it away. Yet we are not permitted to doubt the causal conection between our wish and our act, except in the cloistered retreat of the psychological laboratory, or the barred retreat of the insane asylum. The preponderance of reason is on the side of the assumption of an *élan* which knows and purposes its deeds, and is but another name for God. This conclusion gains added force in the light of modern genetics which discloses that new forms and functions are laid down in an original cell in advance of the existence of the previsioned organism.

CHAPTER XXIV

The Second Dimension of Time

BY REFERRING to the atom as an event in a space-time continuum, modern physics has set a new emphasis on the place and meaning of time in the world order. Not only is time cited as a fourth dimension of space, since our notion of space depends on the time of passage from point to point, but a world whose only permanence is change calls for a new inventory of time. Upon time depends the diversity in phenomena which makes science possible, for science holds sway by reason of its prediction of coming events in a world where things physical are represented through motion and change. The old struggle between the Heraclitans and the Eleatics appears in the foreground after having been decently interred some twenty-five hundred years. The progress of science now dulls the voices of those who would persistently contend that change is an illusion. The notion of changelessness was compelled to yield the fort with the material monism of the mechanists, who attempted to attach the meaning of change as to a changeless and identical atom. If now we are to admit change as a portion of reality, we must locate permanence somewhere. If we cannot assume that it lies in a monism of substance, it will hardly answer to assert simply that change itself is the only permanence. There must be some permanence to bind the fleeting into relationship and meaning, and it must be something more than an abstraction like "duration" or "change." Whatever this permanence, it must in some measure transcend time, must be conscious of something more than the fleeting event, must be able to remember happenings that are past and from them to reap a synthesis with what now is and with what will be. It becomes immediately apparent that time has no meaning apart from self-referring intelligence. The separation we are able to make between events under the form of time makes experience possible, for change is experience and experience is experience of change.

Time and Change

There is no idea more common to thought than that of change and scarcely any idea more difficult to define. We assume its reality as an experience without an inquiry into its meaning. Change, as a

movement in space, is fairly obvious because apparent to the eye, but reflection upon its nature soon leads us into deeper waters. This ability to visualize change merely as a form of spatial movement has kept many philosophers and scientists from a realization of the true nature of the concept. If we begin with Hobbes by saying: "All that exists is matter and all that occurs is motion," change is nothing more or less than a differential in the rate of motion of a fundamental unit such as the atom. Quality is a paradoxical interpretation of the speed with which qualityless particles move in space. The assumption appears ridiculous, reduced to these terms, but is commonly received without scrutiny or question. Why the mind should interpret such movements in space as blue, green, or yellow, or as A, B, D, or G of the musical scale, is for the Hobbesian type of philosophy insoluble.

Such a definition of change meets with further difficulties. Conceiving the fundamental reality to be atoms or particles in rapid motion, what we call qualities are in fact only redistributions in space of units that are alike and unchanging. The identification of the musical note G is a synthesis of many vibrations interpreted as a single unit of meaning, and dependent upon that musical instrument, the ear, for its very existence. Were the ear to be retuned to gather higher rates of vibration, the note G might be like a complete symphony. Something similar would be likewise true of our other senses. The meaning and reality of our world depend then in a very real sense upon our capacity for interpretation, and to make our world something essentially different would need only that certain conceivable changes take place in us. If we are to believe supremely in reality as vibrational, we begin, continue, and end on the quantitative basis, and should properly refer to qualities as illusions of the mind. We shall be further distressed at this point to reflect that with these illusionary qualities out of the picture, we have nothing left, since the vibratory realities we have assumed are not observable by the senses. We have traded, so it seems, a lesser illusion for a greater one. It must be noted here that the real problem before us is not to show that perceptions of quality are accompanied by vibrational change in a related medium, but to show *why*. Such a situation demands a new study of the perceiving subject and his relation to and place in reality. If time is the essence of reality, and is also the form under which the person discerns between experiences, it may be that the person has a much greater place in reality than has been commonly supposed. He might turn out to be the most real of all realities. If time be taken as a relating of events to each other

through an abiding medium of some sort, and this act of relating calls for memory and self-reference, the cat is out of the philosophical bag. Whenever in experience we have a reality that has to do with a temporal order we must have a person who is a part of that reality. Perhaps this is the fabled philosophical black cat that has been hunted in the coal cellar on so many midnights. So far as actual knowledge can go there is but one example of perdurance through change and that is the person.

Change and the Unchanging

If any definition of change is impossible without reference to time; if, as Bergson so brilliantly said, "duration" is the string on which the concept of change must be strung, we must include in our description of it that without which it could not be known, namely the unchanging. In Bergson's earlier work it was, variously, an unchanging "law" of change, duration, or as with Heraclitus, change itself ("the only permanence is change"). Such a definition as the latter, of course, makes change meaningless. The only way that we can tell we are moving is by reference to something (since Einstein) relatively unmoving. Drops of water endowed with consciousness in a flowing river which could see only each other in the same relative positions, but were unaware of the bed or the banks of the river, could possess no consciousness of movement. If change were altogether complete, and there were nothing unmoving for comparison, the changing subject could not know change. Like insensate things, the slightest change would change the person through and through and there would be no continuity in his life. "He is not the same man!" Maybe, but he is still able to see himself as the abiding subject through all changes and experiences. Change is a reality only for some point of relative fixity, and change as experience is possible only to an abiding self-consciousness able to work under the time-transcending form. If we turn to Lotze's definition of reality we may there discover a dictum startlingly appropriate to our discussion: "The real is that which changes and yet survives change." Even slight reflection will show us the one spot in our experience where this paradoxical reality of unchanging change can hold true, and that is in our selfhood, the person. No adequate definition of change then can leave out the personal element. Change has no meaning for that which itself altogether rises and passes away, but only for that which experiences change as a part of its own abiding meaning. We must be in some measure timeless in order to know time, changeless to be aware of change.

The knowledge of change is not something given us offhand or *a priori*, or even empirically, without an attendant constructive activity on the part of the thinking subject. The concept of change does not arise from unassisted perception. There must be a relating activity. The vanished past is set up as a concept, and with what once was is compared that which at this moment seems to be. The so-called core of being is nothing more than the abiding similarities in whatever is undergoing change. But new relations have already entered into its being, constituting it something different and new each moment. The persistence is one of meaning which the mind sets up. Into a perception of what is now existent, the mind recalls its former perceptions and concludes through comparison that this is some sort of continuation of or relation to the past, or a possible future.

Wherever change is apprehended it will be seen as nothing more nor less than a relation, conceived to exist between past, present, and future events, which the mind sets up in furtherance of its intellectual interests. This the mind is able to do without being competent in any way to account for the connection. Any relation thus set up under the order of time becomes an experience of change. What causes the change, what establishes the relations, or what those connections are in reality is a metaphysical question. It thus frequently happens that the mind falls into error with regard to causation, because, while it sets up associations under the form of change, out of the successions and uniformities discoverable in experience, the connections may be fanciful, or the successions merely coincidental. An illustration may be found in the doctrine of change as it relates to the evolution of species. By a deft picturization of change we imagine a species in a vague limbo of both being and nonbeing, and then express wonder that something has come forth that had no previous existence and yet was there all the time. The differences that enter in, to produce a new species, are ascribed to the preceding species which had them not, and these are named as the efficient causes of the new. It is, as a matter of fact, less irrational to place the cause of successive members of an evolutionary series in a time-transcending and purposive urge, force, or Will that grounds the whole process and provides the impetus at the proper time to make the new effort self-perpetuating and vital. This might come from an inspiration proceeding from the depths of a Supreme Consciousness, both in and above nature, as an inspiration, a hunger after a new expression of life when the times are ripe for it.

As has been suggested, the whole significance of change is dependent upon the time-transcending nature of personality. Nowhere save in personality do we find a nexus of change and identity. In human experience change is conscious, and so becomes incorporated in the personality. Bergson described the process under the figure of a rolling snowball which gathers continually new substance into itself. The figure must not be overstressed, for there is a question about the sameness of the snowball, through the successive moments, which does not arise respecting the perceiving person. In the case of the snowball the only identity is an identity of concept to the one who sees the progress of the snowball as a part of a single movement. In the experience of the person the various experiences are set into a frame of reference the center of which is the self. So while change may be affirmed as a universal fact, the experience of change can be had only by some such self-conscious unit as the person, who can gather past, present, and future into a synthesis of meaningful relations.

We have been discussing change primarily as it relates itself to the human experience, but we cannot leave it there. We must assume the existence of a Supreme Person in order to ground the universal system of change and reality. This assumption is of special importance in its bearing upon cosmic theories, such as evolution. As change, viewed from the individual standpoint, demands a person who transcends change, so change in the cosmic order calls for an abiding subject above the process. Only so can we think of evolution as sustaining intelligible relations within itself. The assumption is necessary if we are to relate the beginnings of evolution with its outcome. The short experience of man is too meager to grasp so great a generalization, and unless we are to assume the presence of purpose, it is futile to presume an ordered progress of evolution. Change is a recognized relation between the different members or events in a movement or process, but the relations are set up by intelligence, somewhere, from which they derive coherence and meaning. In the end, no doctrine of universal change can be rationally grounded, except through the affirmation of an abiding Cosmic Intelligence, or a Supreme Creative Person.

Sons of Experience and Suffering

Since we have ventured to use Tennant's description[1] of experience as change, and experience of change, we should, perhaps, inquire into the meaning of experience, because the ordinary em-

[1] *Op. cit.*, Vol. I., p. 342.

piricist is accustomed to accord superior reality to some experiences over others. Experiences of change in nature, for instance, would be accorded scientific reality, while change within man's own moral and spiritual nature, the most significant of all realities, for the life, conduct, and social cooperation of human beings, is hardly accorded the standing of actual experience. Yet the first does not so much deserve the call over the other, as reflection will show.

When some physical object changes, what we have is presumably a change of relations within its constituent parts or with its environment. The sugar that dissolves in our teacup changes from lumpishness to liquidity by reason of involvement in a new set of relations. Something new has entered in, namely: the tea, to constitute the change. One could scarcely point out what it is that abides the change, even if the combination could be restored to the original items, sugar lump, tea, hydrogen, and oxygen. The change has involved time also, which does not turn back. We can make sense out of the experience only by joining the succession of events into a synthesis, which means the arrival of a new quality, sweetened tea. This might properly be called scientific experience but obviously is an experience of changed meaning which the mind sets up in a world of relations. While we may say that such events occur "in the nature of things," and are not manufactured by our minds, our minds have to assign the significance to the changed relations between tea, sugar, and water, and that is the meaning of change.

Mental, psychical, and religious experience does not differ essentially from this, except that it is applied to a different and more important field of relations. My late beloved colleague and friend, Wildon Carr, confessed that examination of a book, Bergson's *L'Evolution Créatrice* in a bookstall along the Seine on a summer holiday, created a turningpoint in his whole life and philosophical interests. Through the occurrence he became conscious of a changed outlook which deeply affected not only his inner life of the mind, but his outer life as well. He had for a great part of his life been a successful financier in London, now he became an equally successful philosopher and inspirer of youth. Shall we say that this inner experience was less an experience, or less real, than the dissolving sugar in his tea? The most important fact about the tea experience lies in its relation to the pleasure or comfort of the experiencing person to whom the presence or absence of tea and sugar make a difference. The reality of tea and sugar would not be enhanced by expressing its composition in the terms of chemical formula, though it might appear more scientific. In spite of appear-

ances, experiences both subjective and objective get their reality from their interpretation, or at least from their interpretability by the subject of the experience and any event must in some sense be pronounced real if it makes a difference in human life or conduct. If the so-called religious experience makes a difference by setting a man's life, motives, attitudes, loves, and desires to a new key, it must be accorded reality. In this case, the proof of the reality must be discoverable in the life and activity of the person, in something the same way that the hidden realities of the atom are disclosed by the activities that can be observed. So far as the subject of religious experience is concerned such an event may be for him, as was Dr. Carr's intellectual experience, the most important of all events, and its value and religious character must be judged not by his emotional feeling, important to the results as that may be, but by its expression of a new order of morality and spiritual insight and goodness. Even the "consciousness of God" experienced by a Boehme, a Luther, or a Wesley, must be substantiated as something more than hallucination by the works that follow. When these works do follow there is no more reason for dismissing the experience as unreal, than there would be to deny credibility to the activities of the atom.

Failure to include the subjectively real as a part of valid experience has worked deadly havoc in the life of our day. In contemplation of the externals, we have denied the realities of both the mind and spirit of man, necessary to a normally functioning society. In clinging to the objective, science has been within its field, but in its frequent ridicule of the subjective, it has shut out the self, and the consideration of the self from its world of credulity and fact. Yet it must establish its own claims in this very region, if it is to be believed. Add also the fact, that for the life and progress of man, within the subjective lies the most important field of reality and experience. Science has greatly broadened our world of reality, but too often at the expense of "the things that matter most," the *tò timiótaton*, which Plotinus used to describe the concern of philosophy. Science has taught us the physical control of nature without anxiety for the moral character of the persons who are to be the controllers of nature. It has frequently done this with a bloodless indifference to either personal or social results by a pretended worship of "truth" which was a sort of scientific claim to "absoluteness," rendering it above question or responsibility. We now reap the harvest of this indifference in the latest inventions, turned to the most devilish and inhuman uses, for the destruction of civiliza-

tion. If responsibility is disclaimed on the part of science for the misuse of such inventions, there is still not complete absolution, for the present ethical situation is largely due to the abrogation of the realm of the moral and spiritual as if it did not possess equal validity with the physical. At the same time it must be admitted that the guilt is a common one in which we have all been partakers, both the scientists, in the worship they have given to materialism, and the religionists, for their lack of intellectual integrity and their worship of mammon. Science is now coming to a better way of thinking. It is perhaps more clear-eyed to the issues raised than some of the religious. Let us hope that the sons of experience and suffering will learn to profit by the lesson of the terrible hours so recent in experience to advance to a new cooperation and emphasis on the moral and spiritual realities.

The Conquest of Entropy

One result of the all but exclusive attention paid to the mechanical aspects of reality has been the oversight of the meaning in the cosmic order of the appearance of life. In a mechanist's world, the most important law is the law of entropy—in every transformation of energy there is a loss. Thus it may be said that the material world is running down. Lugubrious voices are frequently heard predicting the time when the earth will be abandoned as our sun burns to an exhausted cinder. In the face of such statements it is comforting to reflect that whatever or wherever our state of existence some millions of years from now, the condition of a worn-out sun will likely be a matter of little importance to us. We have been so much concerned with the running down of the physical machine that we have overlooked the one place where there is prospect that the law of entropy may be overcome, namely, in the realm of life. Here we have the entrance into the "dead world of matter" of that which gathers new energy and new forms of energy out of the disintegrating world into which it is thrust. Here we may come upon the significance and reality of a changing world. Significance and reality can be accorded to change only as it proceeds from and furnishes meaning for self-conscious intelligence and life. The darkness of materialistic pessimism should be made to face the facts of the resurgence of life, which if it met with no restraints, or natural disorders, would soon fill the world so full of living organisms that man himself would be crowded out. This bladderful of peas has also been rattled in our faces to add to the general gloom. Even a pessimist if not too set in his ideas might discover that life is

lord of death, though in its full significance this insight is the gift of faith and accrues to life in its highest and spiritual ranges. The master of this energy which takes the dying forces of the physical universe and out of them constructs increased energy is the Creator of life and to some extent, man himself. This power arises out of his relation to the forces of life, and the force which is behind all life. It is his unique privilege to become a co-worker with God himself to build a new and better world. Since it is to be a world in which he can more largely participate, a world of his thoughts, acts, and aspirations, it must be a world of which he is a co-creator.

There are various aspects of life which empower it for the conquest of entropy. First among these might be considered the power of readaptation of function to environment, the response of the functioning organism to things other than itself. This is the main distinction between life and death. Incapacity to readapt itself to surrounding conditions sets the most organized body back into the kingdom of the inorganic. Life is then a self-functioning organism in which the relations to bodies foreign to itself present the field of continuous readaptation. A process of assimilation, repair, and decay goes on unceasingly and this process is life.

Life must be considered also from the standpoint of its selective power. It has power to break down other organisms and to subdue the inorganic to a servitude in line with its own goals. Frequently the things it chooses for the building up of its structure are not the things most generously present in its environment. Here too it does not work for its own prosperity alone, but works as if it had a mind to all the other elements in the universe. A good illustration of this selective power is to be found in the kelp which gathers out of the sea water one of the lesser constituents for predominance in its own organism. There is present a power which might easily be taken for a form of voluntarism. How is this selective power exercised? It seems essentially different from chemical affinity, for it transmutes the dead into the living, if a voluntarism in any sense, it is exercised under great restrictions. Plants react in uniform ways, tropisms are in uniform directions, yet we witness a conquest of the inorganic by the organic which is peculiar to life.

A further element enters in which might be called the individuality of the organism. It builds an interior within which its activities shall take place. Around the central unit it throws a wall of protection. It makes a combination peculiar to itself. We have the suggestion of social organization. It is a combination for offense and for defense, having the imprint of individuality. Out of the

relationship of its separate members it establishes an integrity all its own, and accomplishes that which no mere combination of chemical elements could do alone. Out of this created individualism grow new powers of sustenance, and where the organism is attacked and partly destroyed, separate organs strive to take over the functions of deleted members to preserve the common existence to perpetuate a plan. Its future depends upon keeping up the activity, and continually overcoming and enslaving matter to its own needs, but it conquers also by yielding. It deletes matter no longer useful to its purposes.

All this process involves a further characteristic, an evident purpose. In the prosecution of its struggle with the inorganic there appear values worth preserving. This organism that has arisen above the dead level of inorganic things carries an end in itself. It provides not only for its own survival, but it prepares against a future it cannot foresee. Wherever one finds provision for the future, attention to the storing of energy, of nutriment, providing weapons of survival over hostile environments, we have, whether we like it or not, the clear evidence of purpose. The efforts of the organism now seem to entertain a double purpose, that of self-preservation would be remarkable, but there is the greater one of continued existence for the species. In the preparation of the organism to propagate, to rule the future when its own substance has lapsed back to the inorganic, we have perhaps the first stirrings of a desire for immortality. Though we decry in this process the existence of purpose with dialectical skill and scientific ardor, the facts speak louder than any words we can utter. In life, purpose has *visibly* arrived in the universe though it has been long present. It has now incontestably *arrived.*

But in its conquest of entropy it was not for life to linger in the lower levels of expression. The whole creation seems to have been working even from the beginning to greater and greater measures of self-consciousness. So gradual has been the approach to self-consciousness that the demarking lines seem almost illegible. Between the most sensitive plant and the most plantlike animal there is little to choose. Unless we start with a provisional panpsychism, the coming of consciousness is incredible. The living organism has been acting as if there were a conscious intelligence either within it, or behind it, urging it on. If one prefers to think of it as within the atom, the cell, or the organism, his position is still lacking the explanatory element unless he assumes that the inner urge arises from a creative and purposive Supreme Self-Consciousness. On the

plane of self-consciousness we have animal life, with a new capacity for reactions to environment.

By such ascending process does life climb the ladder of existence to its highest expression, the ability to transcend both time and change. The conspicuous differences in human lives, do they not spring from the varying degrees with which persons are able, allowing a timeworn expression, to view life *sub specie aeternitatis*, under the aspect of eternity? In its forward look the longing for eternity is but the continuance of that urge which began far off, at least in the first strivings of the living cell, and mayhap in the atom itself. Life may be considered as not achieved in its highest and truest sense until it has shown its conquering power to take into itself all change and to survive forever. Eternal life may be not only the reward of living but the real goal of the evolutionary process. Certain it is that from beginning to end there are countless indications of a reaching forth to this ultimate goal. Only in the light of such assumptions can we make existence appear reasonable.

The Second Dimension of Time

In the struggle of atom, cell, conscious and unconscious organism, to capture and put its imprint on the frame of time we have a suggestion of what might be called the second dimension of time. Because of the transcendent nature of the person, who is something more than his works, something more than the dreams and ambitions of a particular moment, it must be noted that the work of the greatest, the brainiest, the most artistic, or the saintliest of men is never more than a beginning of what his powers prophesy. The world of matter may speak of a past, a present, and a future, narrowing continually in significance through a law of entropy, but not so with the person. No creative soul has ever been able to complete its self-expression here. It lays down its earthly tasks at the point when, by reason of experience and mastery, it should begin a career of new creativeness. To this end it commonly and naturally craves eternity. This is the natural state of the person who has lived for something more than the satisfaction of selfish desires. Ennui of life falls only upon those who think primarily of their selfish interests, which interests grow morbidly with every satisfaction to an increasing dissatisfaction. The person who finds his life in some eternal emprise craves the privilege of "going on and ever to be." That is a significant remark of Lewis Mumford[2] that "the pathos of time affected those people who had lost faith in eternity." Dante

[2]*The Condition of Man*, Harcourt, Brace, N. Y., p. 180.

praised his old master Bruno Latini as the man who taught the Florentines how to make themselves immortal. In a world which is nothing but beginnings, a second dimension of time is essential to the thought and planning of men who are to make the most of the first dimension. A world which, humanly speaking, is a place of beginnings, calls for a larger world and a time, for all such pilgrims of the spirit as are prepared to profit, by its extension into a second dimension. Such an expectation is only in keeping with the tale which all existence tells from the humblest atom to the veriest saint. The first atom speaks of a world yet to be, sentient life discloses the probable approach of a higher consciousness, and the life of man is heavy with the promise of immortality. Both what we are now and what we yet shall be is wrapped up in our concept of time, much as the modern scientist's definition makes time the very essence of reality in the atom. The activities and attitudes toward life, of men, nations, and races are dominated by their concept of time. Given the finished order of a cyclic theory in which identical situations are ever recurrent, progress, discovery, and invention are blasted at the root. The person himself becomes but a particle bound to the wheel of fate, a fate which he can nowise escape save through the hope of annihilation. With the abdication of the power of the person over events, he becomes the easy prey of absolutisms in thought, and of totalitarianisms in society. A Hegel naturally precedes a Hitler, but both branch from the same tree of concepts. The idea of a continuous movement is necessary to progress. But in man such a thought involves something more than the physical adaptation to environment characteristic of the lower species. The modern dream of progress is for the greater part indulged on the vegetable, or at most on the animal, level, which means death and disintegration of higher powers, even the powers of enjoyment. We may become men or beasts, but we cannot become truly men without the tuning of life to our spiritual possibilities, possibilities in which the modern world does not seem to believe. But we shall either march on to the spiritual manhood of men who live after and in the second dimension of time, or we shall become as the beasts and our beastly life will be full of degradation and misery. We shall not be saved from this fate by the better distribution of goods, or measures of security alone, though without these ameliorations of the lot of forgotten men we shall not long retain our souls. The challenge of the hour is that we shall begin to live in the second dimension of time.

This truth holds also for those disciples of the cataclysmic dogma

who fondly dream of the redemption of the world through the belligerent force of St. Michael with a gleaming sword and legions of military angels in his train. The Kingdom of God is an internal kingdom, not of this world, and has about it nothing of the rulers of this world. It is altogether voluntary, for no force, nor fright, nor fear has power to transform character. The children of light are such because they love the light rather than the darkness, and abhor the presence of darkness. Character is the love of goodness without fear and without reward beyond itself. No Judgment Day could bring a reversal of these principles which are inherent in righteousness. The hope of a cataclysmic redemption based on the acceptance of theological beliefs or obedience to prescribed formulas, irrespective of redemption of character, is as futile as the dream of a paradise induced by plenty, by social organization, scientific advance or "security." Time is continuous, and its existence, as in the case of the atom, is so bound up with the reality of the soul that it is altogether impossible to divorce its first from its second dimension. Here and now we are living in and partaking of eternal life, and if there is to be assurance of a life to come, it can only be by seizing upon it and living after its mandates here and now. The eternal life has its beginning in time. In fact the very essence of personality lies in its conquest of time, that transcending power by which it may become immortal.

CHAPTER XXV

The Personal World

As LATE at least as 1912, the late Lord Kelvin was informing the British Association, that now having constructed a wooden model of the atom, we knew all about it, while Desch, as late as 1925 reported the lumpish atom to be indubitably proved. Already there had been much stirring in the dead branches of this lifeless smugness so lost in its dreams, so content with a static world, so far from life. Einstein had set forth his doctrine of relativity, and after the first flurries of opposition and ridicule, and men began to see the reasonableness and practicability of his discovery, events moved with startling speed. Since 1925 we have moved from a world of static concepts into one that emphasizes movement and life, with results even more revolutionary than attended the change from the Ptolemaic to the Copernican astronomy. In general, it has been a movement out of Absolutes into Relations. Now it is seen that the essences of things do not stand alone and independent, but are what they are by relation to the whole. One of the most striking results is the discovery of man himself as a necessary and efficient contributor to our knowledge of the physical universe. We have been astonished at the discovery of potent forces and realities hitherto unobservable by the senses, to which our three- or four-dimensional world seems an oversimplification. For instance, the Roentgen ray and attendant discoveries by means of which solid, and to us, impenetrable, substances are as gauze through which other substances can be photographed: the marvels of wireless transmission of electric force, of radio and television have upset our fixed old world, and have all but introduced a new. We can no longer axiomatize that two bodies cannot occupy the same space at the same time because our definition of matter has been revolutionized. We now find our three-dimensional world is peculiar to our human way of looking at things and our human capacities. We are not so sure as formerly that we know all about the atom, and we stagger on the brink of vaster discoveries as science sets itself to more difficult tasks of unraveling its secrets. What we have already been able to do by tuning in on these hitherto unknown cosmic forces is, in practical results, as if we had provided ourselves with new senses by extending the range of the old ones. The result is a new world of relations and a new

world relative to man. We are beginning to see that what the world is depends upon man's uses and interpretations of it, how he seizes upon these newly given powers to make it what he desires it to be.

In such a world it is impossible to look upon man as a waif of time, the result of accident, contemptible in comparison with the wide reaches of the universe. He is not now so easily laughed off, and day by day ever-new investigations are building for him a larger place in the cosmic order. Who would have dared, a few short years ago, to suggest the uniqueness of man in face of the certainty that he would be laughed to scorn at the idea that in the extent of an infinite universe, there were not countless other inhabited planets like our own. To express such a possibility was considered an evidence of ignorance, parochialism, or theological interest, for even science as well as theology has been frequently swept off its feet by the glamor of loose oratory. Now it appears that man may be not only unique, but there is growing evidence of the possible uniqueness of the earth itself. Rare in astronomical history is the occurrence which builds a planet like our own, and rare to uniqueness are the attendant conditions requisite to the life of which we are a part. The proportions of water in relation to land, the essential gases, carbon, hydrogen, and oxygen, the tilt of the earth on its axis, its size and distance from the sun, making possible the retention of these gases, and a temperature possible for life; all these and uncounted other conditions that minister to the existence of man are, so far as we now know, not found on any other planet. In view of such facts the old statements about countless other earths are in the highest degree unscientific. Since the days of Giordano Bruno we have been so surfeited with the wine of vastness, that to accord man a place above that of cosmic dust has been made to appear an impudence, as though the unusual or unique were less important than the commonplace or extensive. Willy-nilly, we now feel the earth itself shrinking beneath our feet as with mechanical devices we conquer both space and time and return to the neighborhood world that characterized the ancient Mediterranean cultures, only we are now deprived of the larger world of myth. We live once more in a little world, and man himself takes on a new importance with the conquest of space and time, and the moral and spiritual realities attain a new significance.

Unique Earth and Person

We can no longer overlook, and in the name of science, minify the increasing evidences that man—not the present man perhaps,

for he occasionally makes a sorry spectacle, but a future man—is the designed goal of evolutionary processes. If, through the ages, stars have been turned from their courses that out of the cataclysm might come a habitable world, and following this, the minute conditions for the production of life have been brought into being, how can there exist a reasonable doubt that the earth was made for man? Certainly no sane evolutionist can think otherwise. In a world of complicated relations it is given to man alone to understand his relationship, and out of that understanding to grasp powers of creativeness. All things have been put under his feet. To him is given that comprehension of moral duty in relationship, toward which the animal gropes but blindly in its care for its young. Great as is the confirmation of man's importance by the planetary aspects of the earth, these are of small moment compared with the preparation for his coming in the realm of the moral and spiritual life. In the organic world, the testimony to creative purpose looking toward man reaches its highest level. We cannot understand the processes of the living organism without viewing it as though under the guidance of thought to an end. So declares the Professor of Genetics at Cambridge,[1] and Sir Charles Sherrington, Waynefleet Professor of Physiology at Oxford adds his very significant testimony[2] that an immanent principle seems to inspire each cell with knowledge for carrying out a general design. In view of these facts, the next great discoveries may hinge upon the disclosure of man to himself. This may be not only in the use of his powers in the physical control of the universe, but above all a new study of the design and purpose of his coming with the latent and unused powers which the age-long preparation prophesies. There must be spiritual achievements in the wind, for man cannot be truly deemed to have mastered his world until he has mastered himself and his world of human and spiritual relations. The times call for a new and more serious study of his mental and spiritual capacities.

Relativity and Unity

The development of the doctrine of relativity has gone far to establish the fact of the relative nature of all existence, but relativity must be seen as further evidence of cosmic unity. This cosmic unity cannot be assumed after the manner of the oversimplifica-

[1] R. C. Punnett in *Background to Modern Science* (edited by Needham and Pagel), p. 196.

[2] *Man on His Nature*, Gifford Lectures 1937-38. Macmillan, N. Y., p. 106.

tions of a materialistic monism, but is of intricate and complex order. The assumption of unity is necessary to understanding, and fundamental to scientific knowledge, in much the same way that it becomes necessary to sum up the unity of the moral relationships under the concept of God. Our consciousness of this unity may be difficult to explain, but it is universal and necessary. The universe is a complicated order of relations in which the remotest part bears relationship to the whole. The relation between the universe and thinking minds makes perception possible. The relation between perceived objects grounds scientific knowledge, between thinking minds, the relations provide the content of social understanding, between thinking minds and the world order, they form the basis of religious concepts. Neither for practical uses nor for understanding is there place for a world out of relation. The experimental establishment of relations is the task of science, the reasonable coherence of assumptions respecting relations is the field of philosophy, and the practical venture on the conceived integrity and justice of the universal relations is religion. Each in its own field deals with the essential unity of the world of relations, and hence on a common dogma, variously applied. The understanding and application of the varying relations of the world, is the beginning, continuance, and end of knowledge.

This unity of relations is the primary assumption of thought and of life. Is it a unity which the mind itself creates? In one respect, yes! It may be considered as the way we look at things because all are in some way related to our own experience as a center of cognition. The observer looks upon himself as that to which all things bear relation, therefore his world appears as a unity of which he is the focus. Were this the whole story of reality, the world would appear but an illusion of individual minds. Here lies the difficulty in any radical pluralism. It is true that we may view the world from the standpoint of disparateness and disunity. It is true that we can determine what our own units of consideration shall be. We may look at a watch from the standpoint of a conglomeration of meaningless parts such as they would be if heaped in a pile before the average observer. We might attempt to classify our knowledge in a sort of botanical way by putting in discrete heaps the wheels, the cogs, the rods, the jewels, and the springs. We may insist on the nature of what lies before us as a watch, in which case we must have all the parts functioning properly. This time it may be discovered that the tiniest and most insignificant part there is as important to proper functioning as the great mainspring, which is a fact akin to

democracy in a properly functioning society. The ability of the mind to single out units upon which it desires to train attention is a convenient device for the furtherance of knowledge, but these particularities can never by themselves contain the whole of reality. Thus it is not the pluralities so much as the relation of pluralities that brings us knowledge.

There is still another type of unity, that of being or happening together. Such is the mechanistic concept of things. Causation would be such as one strand of excelsior in a pile might exert on the configuration of another strand on which it fell. The way one particle "lies" "causes" the conformation of the other. The uselessness of the concept for knowledge is apparent when we reflect that in such a case we can reverse cause and effect without injury to the argument.

Unity an Aspect of Higher Relations

We have, so far, considered two types of unity, the unity of thought based on the postulate of our understanding, and a unity of objective togetherness. How are we to get the two together, or to show that they correspond with each other and with reality? Can a unity constructed by the mind find correspondence in the order of nature? This would seem possible on a single condition, that of a common source. If mind is a phase of nature, and nature a phase of mind, one may truly represent the other, and the unities essential to rationality may be real. In this way alone can objective relations have intelligible meaning. The unity must be one which springs from a higher source, present in the physical world and in mind, and in the original Cause and Creator of both. Furthermore, to be effective, that cause must be self-conscious and purposive. Returning to the illustration of the watch, the unity of relation there discernible would be impossible did not part fit accurately to part to make a timepiece that could function as a watch. So in the separate but never disparate unities of the objective world there must be present a purpose directed toward future functioning. Complexities such as these cannot be blundered into. A merely mental unity is as inadequate as a merely chance and material one. We have a universe whose seemingly exclusive parts find their explanation in a higher unity. Any unity which shows coordination for ends in view is expressive of the intelligence of the cause that creates it, but such cause must be in somewise transcendent, and not altogether and completely caught up in its work. The rule of the sufficient reason, that a cause must be adequate to the effect demands the supposition

of intelligence in a *primal* cause if there is a *final* or purposive cause. Such a metaphysical assumption is not only necessary in connection with an objective world, but necessary to any rational theory of knowledge. Unity in its truest sense implies cooperation in relation to an end, cooperation between things themselves, cooperation between minds and things, cooperation between minds and other minds, and finally, cooperation with the Creator of all. The chromosomes of dandelion protoplasm look forward to a world they have not as yet known, a world in which winds can be utilized for purposes of propagation, and so they provide for the parachute of the future seed. It is only an evasive equivocation to lay that foresight to influence of selection before selection has been in existence. The hardiest advocates of materialism should have seen long since that the assumptions of survival and selection are mere tautologies that can account for nothing, yet we continue to hear them repeated for sheer lack of intelligent explanation. To shut one's eyes to the necessary presence of purpose in first causes is to commit one's self not only to untenable logic but worse. It is to confine one's self to partial and inadequate views of reality.

The Universe as Change

The moment we look upon the universe as change, the demand for intelligent purpose as a part of the cosmic order is intensified. The coordinations are not the coordinations of a world eternally fixed. They are coordinations of action, constantly arising in new combinations, and with growing purposes in view, if evolution is to be considered a fact. Such a causal intelligence must be not only transcendent, but living and self-referring, that is, it must be personal. It must have a consciousness of itself in relation to its creations and to the order of time. Only a personality could transcend and master time in the pursuit of cosmic purposes. If explanation is to be adequate to the facts, we must conclude that unity of any sort which includes purposeful change through time, depends upon the activity of a continuously existing and creating Intelligence, momentarily erecting the world of changing relations into reality.

In the light of these facts a thoroughgoing pluralism becomes unthinkable. Unity between mind and matter is necessary to the simplest perception, for every percept involves an intimate relation between perceived object and perceiving subject. As we travel the high road of growing understanding, the amplification of unities must increase. Even if I make the universe, I do not make its relations to myself and I must provide sufficient standing ground in my

thinking for both the world and the self. An unqualified pluralism compels me to assume a unity in fact which I deny in theory. Knowledge of any kind is an assertion of relations, and relations must be based upon unity in the source of all things. Should these relations involve progress toward an end, then we must assume purpose in the source, and we have none other than a personal world.

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III

THE WORLD OF PERSONS

CHAPTER XXVI

The Tree of Knowledge

To TREAT the problem of evil in any exhaustive way would be to epitomize the outstanding literature and myths of recorded history. The Egyptian Sphinx was presumed to put the question to passers-by as to what animal it is that goes on all fours in the morning, on two feet at noon, and on three at night. The answer to the riddle was, of course, man, but he who could not answer was devoured. In this subtle way was put the truth that man must solve the mystery of his own existence, and in process of solving it would cease to exist. He would die in the attempt to solve the problem of evil, which is the problem of human life. The existence of evil is generally assumed to present the main difficulty in the way of belief in the existence of God, yet apart from religion there has been no important effort to face it. It may properly be called the supreme dilemma of history, and the world religions represent the main efforts to disclose the mystery. The Tree of Knowledge which stood in the Garden of Eden represents a Jewish attempt to picture the problem of evil on the basis of the connection of suffering with learning, the alliance between innocence and ignorance, the linking of sin with the woes of toil, hunger, physical pain, and death, vaguely relieved by the promise of the coming in posterity of one "who should crush the serpent with his heel" to restore the lost paradise

The early myths and literature among most of the tribes of men deal with the same problem, witnessing to a universal consciousness of sin and a troubled conscience over man's own unrealized possibilities. The solution has been attempted in many ways, from the device of minifying its importance by the denial of its existence on the one hand, to the cataclysmic unravelment on the other: some physical event, such as a Last Judgment, changing at a stroke not only the nature of man but doing away also with the voluntary nature essential to goodness. Curiously enough, the period between the eighth and fifth centuries before Christ witnessed a world-wide concern with the problem, and marked the organized beginnings of the world religions.

The Chinese genius was marked by an emphasis upon the Golden Mean which sought a balance between pleasure and pain, and the

avoiding of discomfiture by refraining from inordinate ambitions and desires. Humanistic to a degree was the teaching of Confucius who felt that the solution of life's problem lay in the principle: "nothing to excess." When later the Buddhistic movement began to be felt in China, the Chinese five-spoked wheel, which represented the balance between good and evil, was displaced by the Binary Wheel of Yang and Yin, in which good and evil were more delicately adjusted in human life and history. The good and the bad were in equal proportion and must be considered together to strike the average, which was life. If one suffers today, he will be compensated tomorrow. The head should not be turned by success because a contrasting depth of sorrow waits down the road the turn of tomorrow. The upshot of the system was Confucius' dream of the perfect gentleman, never over-elated or over-depressed, accepting fortune and misfortune with equal calm.

Sakhymuni Buddha sought a solution in a characteristically East Indian fashion, counseling desertion of the world of painful action and misery, for the calm of reflective introspection, and the contemplation of the deeper realities of the spirit. Though his system represented retreat from the world, it yet yielded certain fruits of righteousness in emphasis on human brotherhood, opposition to the caste system, and demand for loving service toward all men.

The myth of Isis and Osiris, as well as the Greek Mysteries that sprang from it, was an essential effort to accomplish purgation from sin, to fit the dying mortal for companionship with the holy gods. Earthly death and sorrow were endurable in view of a future immortality in Paradise.

The classical Greek concept was more nearly like that of the Judaean solution. In the Promethean myth as told by Aeschylus, suffering is the price of knowledge. When learning, the solution of the secret of Io, is complete, the end of suffering is at hand. There will then be disclosed adequate reasons for the distracted consciousness of man, symbolized by the pursuing gadflies of Io who had been changed to a heifer at the command of Zeus. Until that secret, the mystery of evil should be learned, the benefactors of the race, symbolized by Prometheus, should be bound to the rock of torture and misunderstanding, as indeed all liberators are to this day.

The nearest approach to the Christian solution was made in late Jewish literature by the Book of Job.[1] Here the loss of physical well-being, wealth, health, friends, and finally, of everything but faith

[1]For an extended discussion of Job, Prometheus, and other dramas on the problem of evil, see the author's *Christ and the Dramas of Doubt.* Abingdon Press. O.P.

in God, results in the emergence of the hero completely satisfied with the vision of God. In this supreme consciousness the balance of earthly ills is restored.

In Dante's *Divine Comedy* the cause of suffering is based in sin which is an abuse of freedom. The pains of Hell are the natural results of human misdeeds. Each man creates his own Hell by his choices of action, and his punishment is to swim in his own broth. The tragedy lies in the setting of character into a form which seeks no escape from torment because paralyzed by its own misdemeanors into a preference for evil. Thus while the torments of Hell seem unbearable, even more so to the sinner would be the company of the saints.

Goethe's *Faust* attacks the problem in a German way, by framing a different answer for different classes of society. Unhappy Margaret, the peasant girl, is represented as having before her only one road to peace, that of contrite repentance and confession, refusal of escape from the gallows because that would be but to prolong the sin. The scholarly upper-class chief sinner, Faust, is required to do no more than take a vacation in the highlands for the worship of nature, and at the end of life to turn from a career of unmitigated selfishness to a single experiment of ameliorating the lot of the poor. He becomes so happy over a single act of charity that it kills him, constraining him to utter the fateful words of his compact with the Devil: "Ah still delay, thou art so fair." For the privileged class there is no need for remorse, repentance, or restitution.[2] The drama of *Faust* provides the clue to the moral callousness of the German military and Junker classes. *Faust* preceded *Mein Kampf* as the contemporary Nazi bible.

Within the framework of Christianity, various efforts have been made in addition to that of Dante to answer the problem, though a close relationship between all efforts is increasingly evident. One variety is to be found in the apocalyptic or cataclysmic solution depending on the books of *Daniel* and of *Revelation* in the Old and New Testaments respectively. There is present also in this interpretation a very potent, though commonly less recognized, influence stemming from the Zoroastrian and Manichean accounts of the war between good and evil. These solutions have the common theme of the overcoming of evil by external force. The interpretation is essentially pessimistic, derogating from the moral stature of man, representing him as depraved by nature, and itself denying freedom.

[2]This attitude should not be ascribed to Germans generally. One of the greatest, Rudolf Eucken, warmly commended this interpretation of *Faust* in 1913.

Such interpreters overlook the essence of morality and the spiritual nature of man which can have no existence apart from freedom. Without liberty, moral character is impossible. The moral nature cannot be the creation of force or constraint, from without or from within, for moral character rests on a genuine love of goodness, which is also a love of God. It can no more be the result of force or fear than love for a human being can be compelled. We have only to consider the requisites for moral character, to realize how far from the Christian standpoint is such a type of religion. It would scarcely do credit to Zoroastrianism or Manicheanism.

The outstanding attempt to bring home to popular comprehension the Christian solution is found in the Protestant Communion service and in the Catholic sacrifice of the Mass, which are dramatizations of the relation between sacrifice and godliness. To those prepared to understand it, the Mass undoubtedly serves to call attention to the highest principle of human salvation which achieved expression in the words of Jesus: "He that seeketh to save his life shall lose it, and he that loseth his life for my sake and the Gospel's shall keep it unto life eternal." There is in these, as in every other form or symbol, the danger of accepting the outward token as a substitute for the inner fact.

These various efforts at the solution of the problem of evil, which represent but a small portion of such attempts, are mentioned not in criticism nor in condemnation. Each presents some salient truth, some discovery of importance to the Christian interpretation. If Christianity is to demonstrate itself as the universal religion, it must include in its purview the truths in all other religious systems. Such an outlook may distinguish between the religions of the world and the World Religion. The complete Christian solution of the problem of evil will not be reached until there is more general recognition of the essential truth of Jesus' message: the participation of God in human history. Jesus with an astounding boldness offered himself as the interpretation of history. This is the real Christian mystery presented as the answer to the problem of evil. It far transcends our theological disputes about the Deity of Jesus as contrasted with his humanity. The telling fact about his claim to be the Son of Man, or the typical man, was his identification of the Ideal Man with the presence and incarnation of God. No man can be good except God be in him. "He that hath seen me hath seen the Father." This can mean no less than that wherever in human life there is sacrificial love and goodness there is the presence, the manifestation, and, in some degree, the incarnation of God. If we

are to be Christian we must recognize righteousness wherever it appears in human life, and we must recognize it as indicating the presence of God. The Last Supper was not primarily taken as a preparation for death but a preparation for newness of life. The Disciples were about to take up the earthly work that their Master was laying down, and he sought to impress with the necessity of their participation in that spirit which had been his own meat and drink, his own flesh and blood. In the very sustaining of their own fleshly lives there should be a consecration of their strength to his mission. The inspiration which was to send them forth into the world must be identical with that within him. Thus was brought home to them the fact of God's participation in human history. We have indeed been "fools and slow of heart to believe all that the prophets have spoken." Under the spell of Greek philosophy we have in our thought separated God from the world of his creation, and looked upon him as disconnected from the stream of human events. What we need to understand is, that if the present world is to be conceived as having any relation to a world to come, or if the future bears any reward "for the deeds done in the body," time must be considered a continuum in which the present moment is a part of eternity, laden with eternal consequences. If physics can assume that the salient fact about the material world, the very essence of its reality, is an event in a time-space continuum, this too may symbolize for us the supreme reality of spiritual existence as the participation of God in human history.

On the Nature of Evil

Our task is rendered more difficult by the popular failure to distinguish between the kinds and qualities of evil. Many a man lumps death, taxes, loss of money at the races, the fact that evil deeds catch up with him, as evils of a kind that put a legitimate strain on his belief in the existence and goodness of God, who, he argues, being all-powerful, could have prevented all such discomforts. His concept of prayer also accords with this shallowness. We shall not really understand our problem until we make some distinctions, the first of which might be that between physical and moral evil.

Physical evil includes sickness, pain, suffering, death, and an indescribable multiplicity of other ills on the same level. Many of these evils man himself creates through ignorance, carelessness and indifference to physical and moral values, and indulgence of abnormal and depraved appetites. Most of them he can remedy, or learn to remedy, with a growing knowledge, to the acquirement of

which his suffering drives him. Without pain and the power of reflection upon it, his advance from the animal stage would have been highly improbable. Death itself, which he considers the supreme ill, "the King of Terrors," becomes the longed-for refuge of some who feel they can no longer endure the storm of lesser ills.

The educative value of pain and suffering cannot be denied. First of all, pain reaches its highest intensity in the highest types of organism. Man's mental, moral, and spiritual progress, as well as his social advance, makes him increasingly susceptible to pain. No small part of his suffering comes through his capacity to think, to know, to reflect, to visualize, and to imagine. Even a growing capacity to enjoy becomes at the same time a capacity for greater suffering. The larger his treasures of learning and love, the more complex and delicate his social relations, the more sweeping are the possibilities of pain. Accompanying the capacity for suffering comes also a knowledge of relief. Pain is a blessing in disguise, for it is the great danger signal which the body sends up to warn us against physical disaster. Without it the child might destroy himself in his first contact with fire. Pain has provoked the scientific research which has made possible the marvels of modern surgery. Even war, which man could prevent, has led to great advances in knowledge that may result in future good. The possession of a sympathetic nervous system, the organ of physical pain, attended by powers of reflection, has taught men the amelioration of others' woes and made plain the distinction between civilization and barbarism. We are now learning that such distinction lies not in the possession of scientific knowledge as contrasted with ignorance, but in the difference between humanitarianism and moral callousness. Most of the physical evils lie, or may lie, within the remedial power of man, once he has emerged from the darkness of ignorance and achieved a truly moral society. Of the physical ills, only death threatens to be beyond his power to stay. Yet death, as often as not, is kindly, like the relief of the school boy from the hard forms of the school, and in general, death clears the way for the progress of the race. If the present life is but the school of immortality, death may be the greatest of all boons for the person prepared to meet it. Death, as Alfred Noyes put it, may be but a change of key in the golden melody of life. At any rate it may become the lesser of many ills. Preferable it certainly is to hopeless insanity, some forms of invalidism, or participation in character-wrecking crime. To die in honor is a great victory. To die for others is the supreme moral achievement. Since each generation must struggle out its own solu-

tions, and the solutions of today never quite fit the circumstances of tomorrow, death unclasps the grip of outgrown formulas and gives to the younger generation its opportunity and responsibility. To one who has witnessed suffering in its most acute forms, where death comes as a relief from life, these reflections may seem a bit callous and uncomprehending. The problem at this point becomes a personal one to which we will turn attention later.

With the exception of death, the problem of pain is easy as compared with that of moral evil, which is humanly remediable, and should not be charged to the account of God. The possibility of moral evil is an evidence of the surpassing importance the Creator has placed upon freedom, for the measure of the possibility of moral evil is the measure of freedom as well. Without freedom there can be no morality. Sinlessness without temptation is not moral character. The spiritual development of man depends upon the voluntariness of his choice of goodness. While we can scarcely claim that this is as yet the best possible of worlds, it may be the best of worlds for the training of animal creatures into spiritually minded sons of God. It is impossible to show how there could be any goodness without the possibility of badness. If the goal of evolution is the production of persons, in the highest sense of that term, there must be no weighting of the scales such as would prevent the freedom of man's choice. Divine influences can be thrown in only by man's invitation, which comes with a real longing to escape the entrapments of temptation. To be free to do evil and yet to forsake it, to love and follow the good is to be godlike, and the moral problem, the problem of sin and righteousness is forever within man's own power of solution.

Of very great significance is the fact that with this power there is put within his hands the direction of future evolution, the end of the moratorium in evolution described in another volume.[3] Man may, as he learns the Divine will and conforms to it, become a co-worker with God for the creation of a new world, a New Heaven and a New Earth.

The Personal Solution

Much of our difficulty with the problem of evil arises out of our demand for speedy and universal results. Our lives pass so quickly that no visible progress toward the goal appears to us in the brevity of our little day. The verger of a medieval cathedral once led me into the crypt beside St. Dunstan's well, where the stonecutters had

[3]Flewelling: *The Survival of Western Culture*, Harper, p. 277.

laid the foundations of the structure which their eyes were never to see except in dream. Yet in the solid and well-wrought masonry of this cellar they had proudly carved the symbols of their craftsmanship, each ready to stand by his work and accept responsibility for it so long as the superstructure should remain. On the upper part of a pillar in deep darkness the flashlight of my guide disclosed an utterly beautiful rose carved by the workman in the stone. Not to be seen of men, but for the glory of God, was the meaning that it bore. Out of the perfection of his work he had wrought his own salvation as a craftsman. It was a strictly personal achievement, yet not without its wider implications and influence.

Reference has already been made to the personal quality which resides in any solution of the problem of evil. If it is the suffering of one we love, there is perhaps for us no solution but the one of blind faith after we have done all we can. For the sufferer there is the possibility of turning even suffering into the pure gold of patience and blessing to one's self and to others. The suffering of the Cross became the beacon of the ages, the supreme remonstrance against the power of evil, the ever-powerful reminder of the iniquity of sin. The problem of evil is above all a personal problem which each must solve for himself before the wider problem of society can be settled. My brother cannot solve the problem of my pain, though with sacrificial love he is bound to mitigate it as far as possible. The individual suffers on his cross alone. Here lies the bitter heart of the problem, but here also is the kernel of its solution. The person may by Divine inspiration transmute the suffering into the gold of character. The depth of the suffering may become the measure of the soul. Pain seems often the only weapon that can stab our souls awake and teach us the great realities of life. The personal solution has a social facet as well, for the measure of the conquest of pain and evil fortune becomes the measure of pity for other sufferers, and willingness to divert from them pains known by experience. Out of hardship come strength and fortitude, and through courage, victory. This too may be a part of the evolutionary struggle upward, a portion of "the groaning and travailing in pain . . . waiting for the revelation of the sons of God." Here lies the deeper fact, that no possible ill can come to man which he may not turn into good. Lord Dunsany echoes this thought in one of his plays: Fate cannot harm us if we smile at her.

This is no attempt to escape the terrific problem imposed by the suffering of the innocent with the guilty, or the greater one of the suffering of the innocent for the guilty. But such events must arm

with sacrificial courage every true man to end the iniquity. It will be ended only by the voluntary giving of many lives before we can come generally to understand the contemptibility of selfishness and wrong, and the necessity of exalting righteousness, justice, and truth in every department of human relations. The lesson of the Nuremberg trials should prove an awakener of the sense of unescapable responsibility for individual acts too long asleep in our corporate age. Humanity learns only the hard way, but none of us is called to a life of ease, irresponsibility, carelessness, and self-indulgence so long as one human being is, by reason of untoward conditions, defrauded of the right to be in the fullest sense a person. That we have too often felt our brother's problem to be no concern of ours, so long as we were comfortable, has been the deep damnation of this age which has brought us so near to the twilight of civilization. Until this indifference passes there cannot be peace.

There can be in our minds no illusions respecting the adequacy of the foregoing treatment of the problem of evil. There can be no ultimate solution short of the dream and the fact of immortality. As previously suggested, this world is only a place of beginnings. Nothing is finished here. That is what makes life so interesting. Not only do we spend our years as a tale that is told, but it is a tale of suffering, wrongs, frustrations, struggle toward the unattainable. If this life were all, we should be of all men most miserable. Our world is, to all appearances, a school in which for a few short lessons it is our privilege to learn of possibilities now too great for us. To most men it is unthinkable that these lessons should have no outcome but darkness. As the primary and simple cell worked toward a fulfilment which it could not envision but in its darkness could only *feel* as an inner urge, and out of that feeling brought the world of sentient life into being, so the urge of the human soul is eloquent of brighter and fairer worlds to come. Unless we can attach this meaning to the dreams that throng our souls, there is no solution to the problem of evil, nor indeed any rational explanation of existence.

CHAPTER XXVII

Old Worlds for New

To DESTROY FAITH is to destroy the only world that matters to human beings. The supreme disaster of World War I was the moral debacle symbolized in the declaration that the most solemnly avowed treaty was but "a scrap of paper" in the face of military necessity. Belgium, protected only by the sworn word of Germany, lay open to invasion. Within that decision and that act lurked the long horrors of World War II and threats of a third. A revealing line in the Gospels records a saying of Jesus: "When the Son of Man cometh, shall he find faith in the earth?"[1] This shows the importance attached by the Master to faith in the social order. Faith is the amalgam of society, and without it there is the chaos of Hell. The main question of the present hour is how to restore faith among men. Without it only swift and complete destruction awaits us. Until we can begin to trust safely in each other's promises there can be no peace. Lack of honesty, want of moral integrity, is as disintegrating to human society as it is destructive of personality. Without the restoration of faith we shall go on killing and devastating indefinitely.

Faith is not, however, a mere negative word to ward off ruin, in some last desperate resort. It is the creative essential to constructive undertakings. The author of the *Epistle to the Hebrews* wrote that "through faith . . . the world was framed . . . so that the things that are seen were not made from things that do appear." We might read this statement a thousand times without realizing the depth of its import. An evolving world looking toward man as the supreme goal would find its deepest reality to lie in an initial and a continuing faith. Faith is not only necessary for the beginning of all meaningful creation, but must continue until the appearance of the Ideal Man. We must first believe we can do a thing if we are to do it, and we must have faith not only in the ultimate result, but we must keep faith with our purpose and with our material if we are to do creative work, from business through profession, art, architecture to religion. Faith in our fellow men is the basis on which we accept checks, eat restaurant food, purchase supplies for the household, patronize the public school system, launch on business and other careers,

[1]Luke 18:8.

marry wives, and cast our ballots. Without faith there can be no organized society, no peace. Faith is the basis of our present world, and lack of faith the source of our discords.

The appearance of man on the earth apparently closed the first chapter of biological evolution. Any future progress promises to depend upon man himself. If new worlds are to be created it must be through the intelligent and spiritual cooperation of man with his Creator, with his fellow men, with the material of scientific knowledge, with physical fact, with the spiritual laws of the universe, and with the will of God so far as he is able to ascertain it. If one thing is more certain than another, it is that any new world for which we long can come into being only through the cooperation of persons. New worlds of persons can be constructed because, of all creation, personality is most susceptible of change, but new worlds of persons cannot arise without faith. According to our faith will be the greatness of the world of tomorrow. This is the dilemma of the hour: Have we the moral courage to cooperate in love and charity with all men? Will our love reach over to the slums of the East Side, take in the Negro quarter and the ghetto, include Fifth Avenue and Wall Street, embrace the Indian Pariah, the Buddhist, the Moslem, the Italians, the Japanese, the Germans, and the Russians? Here are the mixed ingredients of the world to come, and our treatment of them as fateful in consequences as the storied casket of Pandora. The luckless, or is it fortunate, world has grown so small that our only salvation lies in concord, in faith in each other. The old divisions of nationalism, even of hemispherism, of speech, race, and religion must be absorbed into the greatness of a faith which takes into benevolent partnership all men of good will, by partnership rather than by assimilation of our opinions. The times call for new worlds which cannot arrive without the deepening and broadening of faith. Through faith the new worlds are about to be framed so that those things shortly to appear must spring from that which is at present unseen. From this standpoint faith must be recognized not as a device for shutting out most of the world in order to enclose a special body of the elect, moved by a superiority complex, and enjoying special privileges over others. Faith is never division but getting together, for where there is faith there is love. Man's life and opportunity are as wide as his faith. Long before his new world appears, he can be living in it for the Kingdom of God is within him. The set of circumstances that is today destroying the old assurances, tossing old watchwords, provincialisms, and prejudices to the scrap-heap of time, provides opportunity for greater living than has before

been possible to man. But the future lies in the hands of men of courage who look not backward but forward, and see a new world through the eyes of faith. The dread cataclysm which has befallen the world is inducing a fluidity in human relations never before existent. Failure at this time to rise to the opportunity may mean ages of darkness, waiting for the coming of an epoch of faith. What is needed now is the catalyst of trust, great faith, to reduce society to order. New worlds are to be made of persons, and persons can make new worlds only through universal cooperation. The need of the hour is not for clever systems, or provincial patterns, but for a genuine effort after human understanding, a will to surrender our dearest prejudices and dogmas to the crucible of world-wide reconstruction. The greatness of the result will be in exact accord with the completeness of our giving, as the silver tones of old cathedral bells caught their qualities from the gold and silver of peasant sacrifices cast into the melting pot of the founder. The question is: How much of life will we throw in? The new worlds for which we should strive are inconsistent with provincialisms of any kind. We must achieve a new faith in man and the dignity of his destiny, a new faith in righteousness, and a new faith in God as helping power, if the darkness of a new Dark Age is not to close in upon us. All unfaith, all unbelief, is paralyzing and destructive of action, inhibiting our best impulses. Faith is the victory that overcomes the world.

Faith a Creative Power

The relation of faith to moral ideals and achievement has been so long recognized, and has become so complete a part of religious teaching as to demand here but passing mention. The quality of religious faith, the conception of God and of man's relation to him, will inevitably determine the ethical achievement of the individual. Ethical acts will rise no higher than the faith.

By faith, however, we do not refer to the narrower sense of the term as religious belief, but rather to that trust in the unachieved which becomes creative. When the airman trusts himself to the air, or the sailor to the sea, there is something in that effort that smacks of faith. When a scholar believes he can master a subject and so sets out to conquer it, or the architect trusts a new idea in architecture, or a man ventures on some dream of achievement, he is exercising that faith which is necessary to the commonest occupations of life. Faith in our fellow men makes possible the world of credit and trade, and underlies our business relations. The existence of

faith in men and institutions gives stability to social organization and government. Faith in the universal applicability of natural law is essential to scientific progress and is the mother of invention.

A field in which the relation of life to faith is not so clear, is that of the creative imagination. This field offers a rich opportunity for research, for the relation is profound, promising important results to the reflective investigator. Much stress is often laid upon the results of psychical inhibitions: the ways in which strong emotions, such as fear, can paralyze the springs of physical activity, have become the commonplaces of the psychological tyro. If fear can so profoundly affect the muscles as to render the victim helpless, how much more can unbelief cut the cord of action in the field of spiritual motives and psychical activities? It appears that faith releases inhibitions and opens a new world of ethical and moral action and creative achievement. The beginning of many a successful business and educational career has followed on religious conversion, in which a man has found a new rapport with life, a new adjustment to circumstance that has freed him from previous restraints. The feeling of confidence in the universe and in what lies behind it, the surety of one's own relations to it, that which is interpreted as a Divine "call," for commitment to great tasks, these become powerful stimuli to the creative imagination wherein often lies great accomplishment. Some faith is necessary to creative achievement of any kind, but work of the highest originality demands faith of a superior sort which manages to take in the sweep of universal relations, such as God, man, and eternity. "Read not the times," said Thoreau, "but the eternities."

Faith Unique to Personality

The fact that faith is the unique possession of human personality is of the utmost import, for it is possible only to a being capable of self-reflection and self-criticism. Therefore it cannot be disconnected from intellect and conviction. It is never blind adherence to other people's opinions, nor can it conflict with assured knowledge. Through reflection and criticism we become conscious of the deeper relations between ourselves and other men, between ourselves and the universal order, between ourselves and that righteousness which is God. Our conviction of the reality and workability of this order as a source of action is the indication of our faith. Through it we attain insight into an ideal relationship between ourselves, our world, and God. Here in the region of ideals, the commitments, the subconscious, lies the laboratory of living, the

workshop of the creative imagination. Here dreams of action are first formulated and impulses encouraged which become strong enough to sweep away all lesser obstructions. So great is this influence, fostered by faith in our dreams, that we become what we ponder, and work and pray to become, often by such unconscious gradations that arrival is a surprise. This accounts for the modesty of genius which has become authoritative to others long before the genius can realize it, and also ahead of the blindness of evil men who cannot foresee even for their own interests that dreams of wickedness already contain the germs of actuality and destruction. As of old there are two classes: one that does not recall having ministered to the sick, the prisoner, the hungry and the naked, and the other which has seen none to whom it did not minister.

Faith an Adjustment to Facts

So completely does faith imply a true adjustment to life and the universe, that it quickly becomes habitual, and in the true sense instinctive, or intuitional.[2] The movements of the bicyclist soon become intuitional, and he cannot become a skilful rider until actions to control the wheel have become largely unconscious. Habitual clean thinking and modest action make safe, or at least well assured, the intuitional responses of decent men and women under the attack of sudden temptation. The man who dallies with evil thoughts or imaginings is never safe. Indeed he may so corrupt the subconscious bases of action that the power to resist wrongdoing is all but lost. Skill in work and in living rests in these intuitional fields, and faith in one's capacity to accomplish becomes the spur to the creative imagination. Faith, in this sense, is of a highly practical nature and an affair of action. It is not to be confused with dogma, creed, or belief, which are frequently entertained in a wholly impractical way. Real faith is action in either the religious or other fields. Faith in business is evidenced by accepting the checks people write, assuming that they are in general honest. Faith in one's mental capacity is not a dogma but launching out on the mental powers as if they could be trusted. Faith in religion is not an opinion that righteousness is desirable, but a practice of righteousness as fundamental to living. Faith is not a statement but an action. If by believing we can do a thing we are enabled to accomplish it, our faith is justified. If believing in the reality of God and

[2]We choose to apply the term "instinct" to the involuntary response of the sense organs, as in dodging a missile; "intuition" to movements made unconscious through habit.

his goodness results in higher ethical accomplishments, faith in God is justified in as empirical a way as any scientific demonstration. Any faith we have really lived is removed from the region of doubt to the region of fact. We do not fear the overthrow of a faith we have lived, for we can truly say, "I know." The faith men fear may be upset has never gone further than comfortable opinion or easy prejudice, it has never been practiced.

Faith and Worlds to Come

Is faith always realizable? Within the brief span of mortal life, no! Is the type of faith which is too great for fulfilment in this mortal life then a waste of powers? We must not overlook its moral and creative influences. In many businesses the chief profits come from the "waste" products. Faith is of little account until it begins to seize on the "impossibilities." No creative work in the worlds of business, of politics, literature, art, and religion amounts to much until it has begun to lay hold upon enduring and eternal qualities. Such is the standard we require of greatness in a picture, a statue, a book, or a life. Does it take hold on the invisible, the everlasting? Works which fail to possess this quality die with the men that produce them. Faith is important because through it alone can one catch in his work the vision of eternity. Great tasks are so much beyond the seeming capacity of mortal powers that, unless there is faith, faith in some immortal, some potent influence, they will not even be attempted. It is the "impossibilities" that faith accomplishes, and the "impossibilities" are of most importance to the race. Does one dream of doing the possible? That is much. But life has not gotten hold upon a man, there is little hope for extension of powers, until he has begun to dream of doing what the average man pronounces impossible. God does not call us to the possible but to the impossible. He who thus learns to dream and work takes hold "upon the age to come." Until he arrives at that point a man never calls upon his utmost capacity. He cannot realize himself until he has come to realize eternity. This is the practical reason for belief in God. Only so can he arrive at the full stature of his manhood and become in the truest sense a person.

After all, our world is what we make it, for it is constituted by all that we can comprehend and dream and plan. New worlds will be products of the creative imaginations of man, and when men are ready to bring them, better worlds will come. We must beware the limitation of our dreams to the obvious and the possible, for such worlds are destined to pass away along with the lusts thereof.

CHAPTER XXVIII

The Tragedy of the Lonely

WE COMMONLY THINK of the world as consisting of things, whereas things would be valueless to us were it not for persons. As we think of building the world we commonly have regard to the increase of physical resources, houses and lands, machinery and factories, bank deposits and populations, social security and distribution of wealth. All these are social goods, yet nowhere do they satisfy the deepest necessities of the human spirit. What shall we profit to have all these things if in gaining them we shall lose the supreme possession of all. These things "after which the Gentiles seek" may for any of us turn to dust and ashes at the collapse of a lifelong friendship, or a heart left empty by the absence of childish voices. Days of toil are as nothing when we can lay their harvest at the feet of a friend, or find our reward in the appreciation of those we honor, the smile of those who have charmed our loneliness with their presence, or who have believed in us when the rest of the world was cynical. What strange conceits move us to believe that new worlds of happiness, peace, and contentment can be brought into being by the invention of gadgets, the multiplication of comforts, the production of conditions in which a man is most likely to say to himself: "Soul take thine ease." This same misunderstanding has sent us scrambling after happiness in ways that can never bring happiness—more comfort, more fame, more social distinction, more financial or more political power—when happiness comes only in humble guise, knocking at every door and meeting rejection on all but an occasional doorstep. Yet if we had all these things after which the nations seek, and were to have swept from us those we love, we should have nothing satisfying left. Our world would be desolate and empty. In the last analysis, what we have been fighting for could be only indirectly more dominions or power, the thing we hoped thereby to preserve was the private sanctity of personality, the associations of honorable men, the right to justice and truth in human relations. Only as we keep these latter shall we have the things of supreme moment. Other things can be restored, lost loyalties and loves are gone forever.

No Persons Without Other Persons

In spite of the unique character of personality and the inviolable field of its inner decisions and experiences, there could be no personality in the truest sense, apart from the existence of other persons. As in the physical world, the surest realities here also lie in relationships. A single atom unrelated would mean nothing. Its true nature is the relationship which it bears to every other atom in the universe. The fact of its existence in a system of relations is what gives it meaning and validity. By itself it is nothing, but as a portion of the general order it gathers significance from the whole cosmos to which it is related. The terrifying nature of the atomic bomb lies in the immeasurable relations it commands. The human atom, the person cannot be less in the meaning of its relationships. Our world is as wide as our comprehension and our love. Whether we shall have the township or the cosmopolitan mind is our own responsibility. We are a part of everything we can understand or hook up with. It is our choice to be great or small as we wish, irrespective of conspicuousness or obscurity. The finer qualities of personality grow out of our correspondencies in human society, our relations to the bad as well as to the good. A lone man on a desert isle would have a desperate struggle to keep from brutishness if the conflict were prolonged unduly. This possibility was keenly felt by the British official, alone in savage surroundings, who insisted on dressing for dinner every day. Only thus could he keep his morale. A child placed in isolation from other persons before the age of memory would grow up an animal. We get our finer characteristics from human association as we learn to regard the rights of others, the lesson of cooperation with others, of dependence, of caring for their needs, the acceptance of social responsibility, the coming of love. Out of these relations personality takes on meaning, and none of them could be omitted without making us something less than we might have been.

Self-realization cannot come to us save as we grasp the meaning of our own experience through the joys and sorrows of our fellows. We read our meanings in them and understand their feelings and sentiments through analogy with our own. The world in which we live is then primarily a world of persons rather than of things. The world of values is a world of personal values. If then, we are to consider the building of a new world we should know that it cannot come by adding field to field, but by realizing the fullest cooperation with, and the completest fulfilment of, the persons in it. Let

us not deceive ourselves, there is no world of peace and prosperity for us so long as we have no care for the underprivileged, the ignorant, the base, either upon our own doorstep or in the jungles of savagery. So long as such conditions survive for others we are prevented from the fullest realization of our own powers and capacities. Either we shall be too dull from callousness to reach the refinement of true persons or our sweetest dreams will be haunted with the sense of unfulfilled duty. In either case we shall not be what we might be. Our art, our learning, and our invention will fall short, while such indifference is fatal to religion. My education must profit by my brother's, my cup of happiness cannot be full while his is empty. The world is in no condition to make its longest strides forward until it has brought up the stragglers in the rear. Furthermore, the stragglers cannot be forced to keep up with the procession, they must be lured by the interest, the inspiration, and the love of the vanguard. Both public and private isolationism are impossible in a world which catches its most potent meanings from the relationship of persons. Such isolationism is a contradiction to the life and purpose of the world. We rise or fall together.

We Realize Ourselves Through Others

"My dollar is my best friend," boasted a disagreeable and suspicious character with whom it was our misfortune to be thrown on a long voyage in a small freighter. Perhaps he did not realize, perhaps he was unwilling to admit, how little a dollar could be, or how small it could make its friends and associates. Perhaps he has never known the contrasting value of a true friendship. My dollar can make very limited response to my love. It has never learned the art of snuggling, and it has never given me the joy in the keeping that comes from letting it go. One of its fatal defects is the faculty for desertion in a crisis, most absent when most needed. As I love it, it shows few propensities to make me grow greater in soul and outlook. It widens no horizons and does not enlarge my world if I love it too much to give it away, or consider it to be my "best friend." It bears the characteristics of a traitor. This friend of the dollar of whom we write, had, according to his report, seen every spot of importance on the earth, and yet he had no knowledge of what he had seen. He was aware of the places of the underworld where more dollars lurked, but of human meanings he was unaware. He mistook the dusky inhabitants of Cairo to be importations from Jamaica. He had heard of no outstanding feature, historical, artistic, or political, of any place visited, but only the location and

activities of the "dives." At the same time he seemed to live in frantic fear of discovery for he left the ship and his unused ticket at Manila. As soon as he thought himself out of sight of his fellow voyagers he was seen on the run. One could scarcely in a lifetime observe a better illustration of how a man is made by his friends, though according to his own admission his only friend was his dollar.

We have no other means of self-realization than that which comes through our relations with other persons. Of all spendthrifts the most reckless is the man who thinks he can live in an attitude of noncooperation and hostility with his surroundings and associates without ruining himself, unless it be indeed forced by a higher loyalty to God and righteousness. In human fellowships we learn what we are, catch a knowledge of normal living, recognize our failings and the way to their mastery, find the way to our best achievements. I have no intelligent understanding of my own motives until I observe those of the man next to me. His actions and reactions become the mirror of my own soul. As I condemn him I condemn myself in all similar deeds. Until I have learned from him, I am in no position to know my own strength or weakness, or to judge the normality of my own desires.

Deeper far that all else is the fact that life never begins to amount to much in achievement, in self-expression, in self-understanding, goodness or happiness until I have begun to spend it on other persons. If I seek to save my life, to spare it for self-enjoyment, I invariably sacrifice its higher opportunities and satisfactions. The weakness of mediocre lives comes from the absence of great loves, great convictions, great adventures on the seas of unselfishness. To live dangerously for others is to draw out one's greatest powers. These are never realized to the full save in the desperate battle for others' good, but then they rise to the heights of genius. The profundity of this truth and its relation to the world order is evidenced by the fact that God has chosen to realize himself through man. The human person is a part of the Divine experience, God needs every man and his joy is not complete without us. Personality, even the personality of the Divine can be realized only through association with other personalities. That God reaches the climax of self-fulfilment in suffering for man is the sublime lesson of the Cross, for God is never greater than when he takes on himself the form of a servant and becomes obedient to death. The hour of self-abasement is the hour of infinite glory. Such is the staggering truth of Christianity which cuts squarely across our pettiness, but it is a truth

from which official Christianity has too often turned, has too often refused to face. Until it does it is correct to say that Christianity has seldom been tried save on one fateful day at Calvary.

The Tragedy of the Lonely

Life, in the ultimate, seems only to present a choice of tragedies: the tragedy of suffering for others, as the way to happiness, or the deeper tragedy which follows the life of self-indulgence. Only the life of love can transmute darkness into light, suffering into joy, and open the wide heart of the world and the way to the larger self. Ultimately that is not tragedy but salvation.

The tragedy of selfishness is the tragedy of the lonely. This tragedy is worse than death, it is eternal death. There is bitterness in it that does not lie on the surface. It is something more than physical loneliness. In physical absence there can be a deeper and more spiritual communion between persons, through which the highest qualities of personalities are realized. As St. Paul put it so profoundly: To be absent from the body was to be present with the Lord, a communion that lacked neither actuality nor power. One friend writes another: "You came and departed, and yet you did not come for you were already here, neither did you go, for you are still with us. Such is the abiding quality of real friendship." To be separated from our friends may very often be to open new vistas of communion with them. There is less poignancy for the loss of those who have passed on into the eternities, for the fellowship survives in reminders of high and unforgettable hours, influences and interests that last as long as life, and to finer souls the sense of continuing presence.

The tragedy of the lonely is to have not and never to have had a friend, or what is worse, never to have been a friend. The problem is in our own hands, for no one can prevent us from being friends even toward the unlovely and the ungrateful. To be friends with those who pay us back in friendship is an easy task. The higher test of friendliness and character lies in the exercise of love toward those who do not reciprocate. Dante, with a clear discernment, placed Satan in Malebolge, frozen in the sea of ice. Satan's diabolism consisted in a betrayal of friendship, a hatred of everybody which had congealed his heart, and held his body to a helpless inactivity of noncooperation with others, a complete repudiation of all true relationship with other persons. His tragedy was that of spiritual loneliness. He could have experienced a true self-love through loving others but in the supposed interests of self he accepted spuri-

ous coin. In betraying others he betrayed himself. Failing to find happiness in the happiness of others he shut himself out from happiness. To love and to lose from sight for a little while, that is not the tragedy of loneliness, but never to have loved at all, that is self-betrayal and the disintegration of personality. Our profound lonelinesses spring from false self-love.

The failure of human relationship is in its real sense a dissociation wherein lies disintegration for the person and for society. In the individual it takes the form of inner conflict where subconscious desires fight with the sense of duty, of morality, or of social tradition. The person, disunified in his desires, disintegrates and the result may be insanity or what is termed dissociated personality. There is a sense in which any person who cultivates subconscious desires at variance with his better nature, may be considered less than sane. The healthy mind is an integrated mind struggling at least to reach the goal of its higher capacities. However feeble, the struggle itself is much, for it keeps alive the soul and gives hope.

The evil and crime that afflict the social order come from those who are dissociated within themselves, and dissociated in relation to others. Crime arises from maladjustments within and without. There is no cure for such conditions that can compare with the unifying of purpose and desire that comes through belief in God and through commitment to the Divine Will.

In the wider ranges of society, the evidences of dissociation are to be seen in war, which cannot give way to peace until nations, races, and continents make the proper adjustments of relationship. The present world is a most glaring example of social dissociation, a subconscious desire for power, property, empire, trade, fighting with bitterness the rising conviction that racial and national equality should be recognized, equitable distribution of goods achieved, and the sanctity of every person defended. This evil spirit of society lurking unconfessed in the world's subconsciousness is tearing mightily at the victim before being cast out. The Nazi hordes disclosed to us in full bloom the enormity of the hidden desires that have been all too general in modern life. The only cure is love—the love that binds men in common interests on the higher levels of association, for as Dante saw so long ago, it still is love that moves the heavens and all the stars.

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CHAPTER XXIX

Friendship Without Capitulation

SOMEWHERE IN ARISTOTLE is to be found the expression that the man who has no need of anyone else must be either a god or a wild beast, because only a god could be self-sufficient. The Christian view outmodes Aristotle, for it holds that not even God could endure being an isolationist. Assertion of the Deity of Jesus implies what the casually-minded and the dogma-ridden fail often to realize, that even to God the achievement of satisfying personality demands the existence of other persons. The Kingdom of God is a kingdom of persons, each with a will of his own which has been conformed to the Divine Will. God fulfils himself through other persons, has need of us as well as our having need of Him. Having emphasized to such a degree the relation of the person to other persons, it may be well to inquire if there has been an overemphasis at this point. People easily become mendicants of friendship, claiming from those upon whom they depend an unreasonable sacrifice which cannot be made except to the detriment of both parties. How far can my friend lay claim to the dominance of my life? Is there a limit? If there is a limit, just where is the line of complete and unselfish duty? Parents frequently make extravagant claims upon their children, and children upon their parents. A mother sometimes demands sacrifices from a daughter which would blight the future of the child for education, artistic success, personal development or marriage. Often such domination passes in the mother's mind as an aspect of love on her part, when it is only unconfessed selfishness and desire of possession. In one of the minor Epistles occurs the advice: "Let every man bear his own burden," while but a few sentences away we have: "Bear ye one another's burdens." Contradictory as the statements appear there is not a shift of meaning but only of emphasis. Neither advice can be safely followed without the other, for they are complementary facets of friendship. The person who receives has duties and obligations as well as he who gives. To be sound, a friendship must be mutually beneficial, even if no more than from the spirit of the recipient. The relation of support and dependence is one of the utmost delicacy, and must be maintained in such a way as not to destroy the self-respect of the receiver, limiting or destroying his powers of self-help and inde-

pendence. Withholding in love is often essential to the good of both giver and recipient. The growth of pusillanimity on the part of the beneficiary will create a mendicant habit and lead to the disintegration of the self. On the other hand a gift means to constrain the actions or opinions of the beneficiary, or to render him subservient, is a bribe that may compass the downfall of the donor. The balance is a delicate one. In the famous Christmas Sermon, Robert Louis Stevenson prays for a few friends without capitulation, and also upon the same condition the ability to keep friends with himself. In the realm of personal relations this would seem well nigh a counsel of perfection. The implications of this statement form the subject of this chapter, for a wiser word than this on friendship has scarcely ever been uttered.

Friendship on the Highest Level Only

There is said to be honor among thieves but at most it is only a fragile relationship, like an armed truce that cannot outlast the division of the spoils. The "honor" rests on the basis of self-interest, from the lowest standpoint, and as such is revocable without notice. No matter how firm such an understanding may be, or how extensive the benefits sought, eventual disagreement is inevitable. Discord is the lurking condition hidden in every unholy contract, whether it be between persons, societies, or nations. No treaty of amity, however coerced, but bears the seeds of dissension unless based on fundamental justice, righteousness, the ultimate good of all parties. Not that the understanding can "have no teeth," be wanting in severe measures, and necessarily be welcomed by all hands, but it must be based on impartial justice, righteousness, the dignity and intrinsic worth of the persons implicated. The nearer the approach to these conditions the more lasting the peace.

Friendships between individuals likewise can be secured only on the basis of the purest intentions. Entered into for self-interest they cannot last, since self-interests are bound to conflict. Self-interest and the pursuit of it are incompatible with high character in the person, and destructive both of love and of self-respect. Too many marriages are entered into from motives of self-interest. As one man put it: "It is as easy to fall in love with an heiress as with anyone else." It goes without saying that the marriage which followed was a failure. Has one such marriage ever been a success, though in other days through social tradition people thus married were condemned to the perpetuation of the misery they had contracted. Perhaps if there were fewer loopholes of escape than at

present there would be less carelessness about entering the relationship. Too often now a premium is put upon thoughtlessness and sudden passion. Some are like the woman who discovered too late that she liked her matrimonial partner "better as a friend than as a husband." These facts have been adduced to indicate the sacred character of all friendships. Emphasis upon the sanctity of marriage serves to put it on the only enduring basis. All friendships partake of the same solemnity according to their degree and in the demand for loyalty, not more for our friend's sake than for our own. The lack of the sense of sanctity in human relations, with the accompanying lack of reverence for the person, is a common source of social ills. To this the word of St. Paul applies: "Our conversation is in Heaven." Friendship may be cultivated in no other way than on the basis of human dignity and personal integrity.

Friendship Without Capitulation

Stevenson was well advised when he described the task of friendship as calling for "all that a man has of delicacy and fortitude." No friendship is safe, though entered upon from the highest motives, if it does not seek to serve its friend, and to which, service by the friend is a secondary consideration. Above all there must be no derogation from self-respect, from inner integrity. If in friendship, and for the sake of preserving it, I lose my self-respect I must inevitably forfeit the friendship, however convincingly my friend may have persuaded toward a course of action my conscience did not approve. This is a law of the moral universe which is never reversed. I must not wrong my higher ideals to keep a friend. To do so is capitulation, and the surrender of his respect as well as my own. A worthy friendship demands mutual reverence for personality.

When it comes to the more intimate friendships of life, their influence is so formative of character as to be fairly determining. We are to be judged largely by our friendships. My world, my future, my understanding of life, my capacity to serve myself and others, all that I shall have and be, my destiny, all these are bound up in the problem of whom I shall admit within the sacred precinct and citadel of my heart. Upon whom or what I set my affections is determining. To entertain there an unworthy friend is as much a sin against my personality as would be the entertaining of divisive and evil thoughts within the subconscious. I shall be anxious to please my friend, and if our friendship is not on a worthy level shall almost surely drop my personal standards to meet his. Do these considerations seem incompatible with encompassing all men, good

and bad, within the circle of our love? Not if we proceed on the honest basis mentioned. I cannot afford to be a partner of his evil intents. The really bad man demands capitulation, the breach of my integrity, because he reaps satisfaction, self-praise in proving by my delinquency that he is "no worse than others." For this reason the evil man is not content without the corruption of others. Such is the defense of his own perverted soul. How then am I to love him, and what does love require at my hands? I must clearly find some expression of my love which can be achieved short of the breaking down of my own integrity. This I cannot surrender without loss to him as well as to myself. My love must assume the form of benevolence, of loyalty to his higher interests, of fair and generous dealing but free from condescension or self-righteousness. I am bound to look out for his interests with a loyalty that exceeds his own. I am bound to interpret him at his best, to exercise faith in the flowering of his better qualities. My love may best be shown by the persistence of my faith in his better possibilities. Holding before him the strength of my confidence in his better self, is often to inspire the realization of that self with a surety and a success that denunciation and fault-finding could never accomplish. There are few individuals who are not susceptible to redeeming love of this kind, which yet may be exercised in full possession of one's self without compromise or capitulation. There is really no incompatibility between love of this order and the love that unlocks the secrets of the heart only to a select few. These few must be tested and proved by time, that we may know that their influence will not be subversive of the best in us.

Friends With One's Self

Our discussion has already introduced the principle mentioned: keeping friends with one's self on the same grim condition of non-capitulation. For the application of this principle we must dip into the nature of the self. The reflective capacity of the person introduces a duality between the spiritual and the physical man which arouses continual argument between what he is and what he ought to be. The source of this argument we call "conscience." Conscience, with all its relativity, depending so much upon social myth, childhood training, and association, is yet a hard master that "makes cowards of us all." Conscience can be amended only through the rejection of such concepts as are shown to be clearly irrational or artificial. The great moral certainties are not thus touched or changed, such as for instance, the Ten Commandments of the Old

Testament or the Two Commandments of the New, the obligation to love our neighbors as ourselves. We may choose to ignore these basic admonitions, to bury them in an avalanche of activity, to suppress them from the mind, but we cannot altogether shut them out from return to torment us. Treated in this way they take a fearful toll in neuroses, moral and mental perversions, idiosyncrasies and obsessions that will not be denied, and that may eventuate in the disintegration of personality. Their power can be broken and personality restored only through the utmost frankness, contrition, and confession. The most serious blow against my personality is to sin against my own self-respect. At any cost I must "keep friends with myself." To fail at this point is self-betrayal. Here is a fact as unavoidable as any in the whole realm of science, as certain as the stars. It is not made true by incorporation into theological formula, by sayings of the Bible, the Creeds or the Saints, it is a law of life. It represents truth grounded in the most factual realities of human existence, as inescapable as the law of gravitation. The working of the law is not dependent upon the whim of an absentee God, it is the law of our being. Unless I can keep, or regain when lost, my self-respect I am done for as a person, for I must live with myself forever. I cannot afford the compulsion to hold my own moral nose at the contemplation of my own deeds, lusts, and desires. This inner life which is *I* can be somewhat covered from friends and acquaintances, and I may gain thereby an undeserved reputation for probity and decency, but I must finally reckon with what I know about myself. So self-respect is not something to be tampered with. This secret self may bedevil everything I try to do, introducing complexes of inferiority that embarrass me on the most exacting occasions, filling me with distrust of my own capacities, shutting me away from success by doors as impenetrable as if they were made of iron. This secret self can bar the door of friendship, inhibit the genius of my creative imagination, turn me back from the realization of my fondest ambitions, transmute my days into a veritable Hell, and become utterly destructive. These are the unvarnished facts we often think to avoid by a turn of the head, absence from the place of religious devotion, or in fact any serious thought. To fail in the task of keeping friends with myself is to disintegrate my personality, to lose my "soul," an event not of by-and-by but of the now-and-here.

The Great Friendship

The gift or practice of friendship has now in our discussion reached demands that may be staggering and seem impossible for

any of us were it not for the presence of another factor or principle that resides in the very nature of things. This element has been sighted by the great moralists of all philosophies and religions. Even those who deny the existence of God are accustomed to invoke this principle under other names such as Nature, *Elan vital*, Force, Science, the Unknowable, or the Absolute. No rational man, however skeptical, can get along without the attempt to relate himself to the whole of things, some eternal fact or principle through which he can interpret himself in relation to his world. His mind demands some standard of explanation. Christianity simplifies the problem by identifying God, or the eternal principle, with ideal manhood as demonstrated in the earthly life of the Christ. Communion here is something more than self-communion, it is fellowship with the Ideal Manhood to which each of us is called, that selfhood after which we seek, a character which we worship and adore. As it comes to occupy this relation to us it becomes effective in the changing of our own lives "into the same image." This is the great friendship in which all other friendships are named or embraced. There is that in man which requires correspondence and relation with that which is not fleeting, failing, and weak, fellowship with a Spirit which is the creative source of goodness, greatness, and genius. So universal is this longing of the human heart that it has given rise to the world-religions, and though we try to supplant it with scientific discovery, it remains a disturbing or comforting strain like the persisting theme of a fugue, whether we accept it or reject it.

The condition may befall anyone when all human friendships are obliterated by time, change, or death. In such an hour the alternative to madness may be the companionship with the Great Friend, that spirit over all and within all which creates life, influences human situations, is never far from any of us, and through the darkness of human despair comes seeking its own. He who has learned in happier hours the practice of this friendship is fortified against the eventualities of circumstance, is buoyed up by a faith in the constitution of things, finds union with the deeper realities, and recovers therefrom strength for every occasion. Who has not learned this profounder secret of the Great Friendship has not truly lived.

To relate one's self thus to the power behind events is to acquire a freedom over circumstance otherwise unachievable. In this relationship, the man of faith can laugh at impossibilities and face an unbelieving world with assurance. Through the Great Friendship one attains new powers, a strength backed by the universe itself.

CHAPTER XXX

Unexpendables

"ASK NOT," wrote John Donne, "for whom the bell tolls; for it tolls for thee." In this poetic phrase was embedded the great truth of the intrinsic worth of the person. I am not only a part of all that I have met, as Ulysses was represented as saying; but all that I have ever met, and all that exists anywhere, is a part of me. There is no portion of the world and no person in it from which or whom I can altogether isolate myself. If I try separation by hating my enemy, he begins without my realizing it to rule my activities as I build my life around this enmity. I come to see him wherever I look; his voice is in every wind; he sets the temper of my thought; the more I hate him, the less can I escape him; the greater my bitterness the more closely he sits with me. Thus are introduced into my character the dominance of instincts, wills and wishes, subconscious imaginings that if indulged will control my action. Such is the extreme result of hatred but even indifference writes itself into what I am to be. If I am indifferent to the last and least man on the rim of civilization that indifference weaves itself into the fabric of my day and society. Indifference is the entering wedge of a selfishness which more and more obstructs the outward progress of life, for the greatness of our world depends upon the greatness of our dream of it, the breadth of our contacts with it. The more far-reaching our interested sympathy, the greater is our world, and we become, or fail to become, the mirror of its greatness. Paradoxical as it may sound, my world can be no greater than am I.

These are the reasons why society can afford no "expendables." Embraced in this truth lies the deeper one of the intrinsic worth of every person, which is also the cornerstone of any true democracy. We often rebel against this idea, for it is pleasant to think of ourselves as superior to others. We hope we are not so vain, so stupid, so irreligious, or so wicked, as some people we can point out. What gratification it is to think we are better than others, or at least no worse. On such occasions of self-glorification we resort to the ancient saw: "The more I see of men, the more I love my dog." We never know who may be expressing the same opinion of us. The intrinsic value of the human spirit lies, for all of us, rather in our potentialities than in our achievement. The person is the only existent being

under the wide sky that can consistently be admitted as possessing potentiality, a future. It is never possible to read the heart of the worst man to discover the stirring of better purposes. It is not so much for what we are as for what we may be, that all society owns an interest in us, has something to gain from our existence, owes us the chance to show what we can do at our best. No life sinks under the burden of frustration and defeat but that all life is the loser. The whole world is made poorer by the possibilities that are never realized. By asserting the intrinsic worth of everyone is not meant to overlook the enemies of society. Many have thrown away the birthright of personality. Some are a menace and a hindrance to the potentialities of others, and so demand attention. Some impress the casual observer as "not worth saving." Nevertheless, most of us can lay claim to the consideration of others, if not by what we have done, at least by what we may do or hope to do. The aim of democracy is to give every man his chance. No one can compel him to profit by his opportunity, but responsibility for failure in a democracy must not rest upon the shortcoming of the state. Personal failure must not be due to the failure of society to provide a fair field. The value of democracy lies in its power to provide scope for all classes and conditions of men. We are so intricately mixed in breed that none can claim from heredity potential superiority in class, race, or nationality. The leader of tomorrow, presented with his fighting chance, may come from any level of society. For this reason the welfare and progress of the whole order is endangered if within its bounds there exists one underprivileged man.

Such a view carries a significant corollary: each of us has a responsibility to the whole. We cannot shirk our place and work in the world without a certain treason to all other men. Forgetfulness of this fact brings disaster. These latter years have provided illustration. Turning aside from unwelcome duty in international affairs to a smug and comfortable isolationism we found ourselves, drawn into unwelcome war that took our bravest and our best.

The Uniqueness of the Person

The first step in considering the problems already raised must take the form of reflection upon the uniqueness of the person. Out of the billions of people living during your lifetime, out of the other billions who lived before you, and other multitudes who will live after you, there is, has been, and will be no other person just like you. You are God's adventure on a new experiment. The physical and spiritual chemistry that comprises you has never been mixed

before nor will be mixed again in exactly the same proportions, as J. Allen Boone writes in *You Are the Adventure.* He declares that your very thumbprints tell you this. They show you to be a marked identity and to possess a uniqueness for all time, out of all existence. Thousands of years ago the Chinese discovered this and made fingerprinting the basis of identification in the sealing of contracts and official papers. Never have two fingerprints been found alike. Every person is an experiment in the chemistry of human life and into his hands is placed the power to make the adventure a success or a failure. Out of the countless oak leaves of any autumn no two will be found alike. They are the expressions of the sun and sod, the sky and the rain, the wind and the calm, and the Father's Will possessing no choice of their own, and yet each possessing its own individuality, as if God had a care for each tiny leaf, individuality but not personality. Into the hands of each person has been committed the power of affecting intelligently the result. Each of us as a unique person cast in an original set of circumstances, which has never obtained before and never can be repeated, is presented with an inimitable privilege of service and self-realization that may be of moment not only to our fellow men but also to the Creator and Upholder of all things. What could be clearer than the implication that for every man who is born into the world, his work is born with him, "and tools to work withal for those who will."

The matter of supreme importance to society is then to profit by the unique gift of each individual. Such gifts are discoverable only under a system of freedom and democracy. They cannot appear under systems of compulsion and regimentation. We must at the same time remember that freedom for the individual can be exercised under no other conditions than those of self-restraint. Freedom and self-restraint are inseparable. Action gains power through inner restraint, harnessing emotion to a higher law of service and worth. Within this frame, then, fear not to exercise your God-given endowment. It is the task of every person to discover his place, his work, his proper contribution to society. There is a real sense in which the whole creation has been laboring in pain waiting for deliverance at his hands. This new sense of power and responsibility must impassion the minds of men if we are to take the next clear steps in the evolution of human society.

The Indispensable Person

The most common of the concepts of physics has been that of the indestructibility of matter, and linked with it the dogma of the

conservation of energy. Forces are conceived, not as spent and futile, but as passing from one form of energy to another. In such a case we should think of the whole of energy as remaining the same. Recent researches cast a shadow upon the earlier assurance. Evidences that energy is lost in transformation, and cannot be reversed in process, that the universe is running down, are counterbalanced by the possibility that both energy and matter are being created. In any case the world must be conceived as having had a beginning, and to be capable of having an end. The newer physics poses a fertile concept in the notion that what we call matter is the result of the balancing of immaterial forces whose nature is energy rather than extension. The atom may be, as some say, "an event in a space-time continuum," it inhabits relations so multiplex as to demand the participation of all other atoms. As these are indispensable to it, it is indispensable to them. The analogy with the society of persons is reasonable. As each person is the bearer of unique capacities, and fulfils them in any degree, he is indispensable to the good, the growth and the progress of society. Let no one dream for one wild moment in bitterness of heart at rejection by men, or whatever the apparent depth of isolation may seem his lot, let him not dream that his life is without import to the world at large. If the individual atom, bearing its minimal relations to all other atoms is important to the balance of the physical order, how much more then is this human atom which can think what it is doing, and point its energies in the direction of moral and spiritual achievement. Who having glimpsed this idea can ever again live carelessly, or say: "My life is of importance to no one"? Or, on the other hand, who can declare: "My life is my own, to be spent as I please, and without responsibility to anyone"? Far from its being nobody's business how I live and employ my powers, it happens to be a bit of everybody's business.

We can make nothing of a universe which is a space-time continuum, and in which every person as space-time transcendent bears a unique part, unless this so tragic person is set out to perform some indispensable portion of the whole of life. If we are to see life whole we must see it in its universal relations, its place in the cosmic order, its cooperation in a Divine plan. In such case it may well be that our sorrows, our sufferings, our frustrations and our bitter disappointments are but the chiselings and polishings that work our own perfection. More than this, they must be considered our contribution to the complete result. Even our failures may turn to the common good under the Divine hand, as a beautiful passage of the

Bhagavad-Gita admonishes: "Bring Him thy failures." In this process the only loss that can come must be by the refusal of cooperation with the Supreme Will, which works in and through all. Because we have reflective powers capable of imaging a desired goal, and a capacity to bend our energy in that direction, there is no person who can be seen as dispensable. Certain men in the late tragic war were spoken of as expendables. Such a phrase overlooks the meaning of democracy, and neglects the fact of the intrinsic worth of every man. If it became necessary for some to die that many others might live, then these were fulfilling in the highest degree an indispensability. Each "expendable" was thereby achieving his highest self-expression. Only on such an assumption, and with a sacred regard for those called upon, was such a sacrifice justifiable. As no single atom could be destroyed without loss to the sum total of the physical order, there is no person logically "expendable" since all are essential to the coming of "the far-off divine event." The Supreme Spirit behind the whole is dependent for self-expression upon the spiritual beings he has created and is creating. The physical world with its complex fabric, its artistry of structure and form, its intricate relations in plant and animal life, has yet another step to take in order to complete the satisfaction and self-expression of its Creator. This can come in no other way than through the spiritual development of man. So intense in this respect is the need of the Supreme Spirit, that in the event of the failure of human spirits, we are told that out of the stones of the dust He would raise up children to Abraham. Creation cannot be completed, nor man himself fully "evolved," until he has realized himself as a son of God. The dark shadow of his tragedies, his problem of evil, the inexplicable suffering of the innocent for the guilty, the fortitude called forth by wasting disease and death, all these to be seen truly, must be seen in the light of general progress toward spiritual self-possession. If we are called to the way of suffering, it is that we may contribute our share to the high goal of creation, the fruits of the Spirit. Though we may be called to the tragedy of suffering alone, it is never for ourselves alone that we suffer.

The World as Self-referent

Seen as a part, a necessary part, in the creation of a spiritual universe as the goal of creation the person acquires a profound significance. Lesser creations of the physical order are to be considered subservient to the order of the spiritual life in man. If we

seek to know the meaning of the world, we must refer to man himself, man at his highest possibilities, as the explanation of existence. It was the ideal Man, Christ, as the interpreter of history that constrained the Seer to write: "All that was made was life in Him" (John I:3,4, Moulton translation). This is quite the reverse of our accustomed technique through which we attempt to explain man by reference to his animal ancestry, his chemical constituents, his food supply, his environment, his nerve reactions or his skeletal structure. The evaluation of man as a ninety-eight-cent collection of chemicals, useful chiefly as fertilizer, seems somehow to come short of satisfying any but the most obdurate materialist. We cannot learn what man is, nor find adequate explanation of his existence, by referring to his world, nor can we explain the world without referring to man. In the gambit of such reflections we discover new meaning in the prophetic insight of St. John. Were we to explore the meaning of the simplest work of man's own creation, we could not do it by analysis of the substance with which he works, but by consideration of the unmatured purposes within his mind. We cannot arrive at the meaning of the house by disclosing the chemical composition of the bricks, nor can we learn the more important and essential facts concerning it by computing its cubical contents. The true meaning of the house is written in terms of life, purpose, intelligence, love, companionship, human tragedy and fulfilment, not forgetting the lisping of baby prayers, all of which with many more facts, make it a shrine and sanctuary for whoever has eyes to see.

If the meaning of the world can be said to depend upon the way in which we look at it, if it is to be judged by our frame of reference, how much more assured is the truth that the world must be referred to man himself to discover its true measure.

The Differentiated Goal

Somewhere Chestov[1] has raised the question why the One, considered by the absolutists to be so self-sufficient, so satisfied with self-contemplation, so independent of man and all his works, should split Himself up into countless body-cells, and set them on a way of life, with, at least in man, so large a degree of contingency and independence. Why indeed! we may ask, were it not for the great gift of freedom, and the need that freedom, through diversity should become the climax of creativity. Man's deepest striving is never realized through the exercise of his lonely and unrelated will. He

[1] *Op. cit.*, p. 165.

finds satisfaction and fulfilment only in and through others. In so far as the objective universe is concerned, the diviner attributes of God can find expression in the earthly order in no other way than by means of the spiritual achievements of man. This is the emphasis of countless texts of the Old and the New Testaments, and is voiced by the seers of all religions. "The spirit of man is the candle of the Lord." "Ye are His witnesses." Unity, even oneness, can never be achieved in undifferentiated isolation, because only the oneness that comes by differentiation, partakes of freedom, of voluntary goodness, becomes a creative experience, is spiritual in nature. Until the arrival of free spirits, willing goodness, cooperating toward the higher ends of creation, the world is without form and void, its meaning does not appear, and darkness is on the face of the deep. True oneness comes through pluralism, the unity of souls through love, diversity of gifts, and unity of spirit.

And is the end of all this differentiation to be re-absorption into the One or the All? Is the little entity we call the self simply something to be swallowed up by death, or to lose its identity in the scheme of things? There is no voice of nature or of experience that would bear out such a contention. There could not be, short of negation and cancellation of the whole process of creation. The highest reality of my own personality comes to me by reason of the experience of some other person or persons, through whom I reach my own fulfilment. We cannot assume the destruction of the evolutionary adventure according to which God creates other beings so that through differentiation there may arise a higher unity that comes by community alone. The unity at the end of the way is a unity of cooperation, not of absorption. Our wills are still ours and infinitely more our wills if we have made them His. Only so shall we find our true selves. The greater our conformity to God's will, the greater our self-realization as persons. The greater our differentiation, the greater our unity with the Divine, because it is a unity achieved in freedom and not by compulsion. The greatness of democracy also lies not in an exact likeness between all its citizens, but in the expression of their diversities toward a common end. So even God's world becomes more meaningful to him as these independent diversities marshal themselves into the service of his righteous will. Should God have made us altogether his own, without our voluntary participation, there had been neither freedom, character, personality, nor spirituality. Voluntary acceptance of the Divine order is the highest of creative acts in which we are privileged participants.

The Gift of Audacity

In spite of our modern talk of progress, we are in some respects as fearful of the unknown as were the sailors of Columbus, who visualized themselves as dropping off the rim of the earth, nevertheless, life and progress have set a premium on audacity. Audacity, as someone has said, is moving forward without any assurance of success. If we are to consider God to be personal, we must also consider him the most audacious of all persons. He has set out to reach a goal by means of free persons, who, in keeping with his moral aims and character, he will not constrain because freedom is of the very essence of morality. That would seem to be the supreme gamble. There is nothing about it cut and dried, but there is superlative faith. Nowhere does creation move toward the dead, the static, the impressionless, but toward diversity, new forms of life, new aspects of living. Why should it be assumed that diversity, growth, so characteristic of His creations, is not also a characteristic of the Divine Personality? To the average person, set in his ways and hugging his comforts, his prejudices, his unlabored and easy opinions, audacity seems the veriest of sins, but is it? God seems to have put a premium on audacity by making it the distinguishing characteristic of every genius, every outstanding philosopher, every great reformer, discoverer, martyr, or saint. "According to the greatness of thy faith be it unto thee!" This was a counsel of audacity. Move out to the frontiers of thy thought and love, and thou shalt find God already there before thee! As Heraclitus contended, "we can never arrive at the frontiers of the soul." The highest, the bravest, the most audaciously right purpose that is in thee is in God also, and you can safely trust the best that you know.

This is a far cry from the safe little isolationist world in which we are usually content to live; a world properly ticketed, with stultified opinions dependent on ruling prejudices, ingrained habits, faulty philosophies, the ways and works of a world which in our time threatens suicide. If there is one fact which more than another shines clear above the dark of our day, it is the general bankruptcy of old ideas and attitudes. If there is one call which more than another becomes increasingly mandatory, it is a call for a sublime audacity in the direction of righteousness.

The new world toward which we aspire, and for which anxious eyes have traced the horizons of flame and destruction, will come through the gift of a great audacity. It must be an audacity moved by an inner passion of faith, faith in righteousness, in justice, in the

intrinsic worth and capacity for holy response on the part of men of all races, tribes, and peoples. It must be essentially a faith in God, in man, and in one's self. There has been more than enough audacity of the wrong sort, the audacity of egotism, of distrust of the common man, of disbelief in his intrinsic value, the audacity of hatred of man and defiance of God. This must be more than matched by an audacity of righteousness.

CHAPTER XXXI

The Measure of a Man

THERE ARE two sayings from widely different sources that seem to bear the same general implication. Protagoras, the Greek philosopher of the fifth century before Christ, and the unknown author of the *Revelation* in the second century after Christ seem to have been in essential agreement as to the importance of man. The first declared that "man is the measure of all things: of things that are, that they are: of things that are not, that they are not." The Seer of *Revelation*, in an attempt to describe the coming City of God, pictures its dimensions according to "the measure of a man."

Our contemporary civilization, toxic with its own sweat, has notoriously overlooked both these wise standpoints from the past. As a result we find ourselves, the war being ended (or is it?) still in a life-and-death struggle to recover and restore to civilization the democratic principles involved in the view that the dimensions of a culture are determined by the needs and demands of the common man. This conflict is no new thing in human history. From the beginning, the dream of democracy has been compelled to fight various forces of autocracy, aristocracy, plutocracy, and hierarchy, which in turn have sought the enslavement of his person. In the passing ages the battle has shifted from one to another, but the issue has been the same, certain intrinsic rights of the person. In our own time the sentiment of the worth of the common man has grown paradoxically enough out of man's triumphs over nature. Into the hands of the common yokel has been placed control of natural powers so great that the man who directs them, either for production or destruction, seems by comparison a pigmy, dwarfed by the machine he controls. The modern man is a victim of the machine in a very literal sense, unless morally and spiritually he is master of himself. So far as materialism alone can carry him, this master of great powers becomes the slave of that which he has created. The myth of Frankenstein has become a dread reality, for the machine may destroy the inventor's soul.

There is a single path out of this dilemma, but one which man, in his conquest of nature, seems little inclined to take. He must discover and pursue those qualities which make him superior to

the material world, those moral and spiritual forces that distinguish him as a man. The measure of his contemplated world, his City of God, must be evaluated not in terms of mechanical invention, as so many think, nor yet of social combination and association, as many others think. These, while necessary to the new day, are outranked in importance by his concept and recognition of the inviolability of personality. Another age depreciated the person by the use of *man* as an abstract term, and placed over him a sublime hierarchy, the God of an absolute theology, so remote from the human being that his presence in the heart of man was lost sight of. God could break into the world of his own creation only by accident or miracle. The world of nature, once created, was looked upon as the work of the Devil. God was assumed to be the victim of his own activity. Man could not be influenced through "natural" powers, but only by some unnatural occurrence. This doctrine fastened upon man the stranglehold of ecclesiastical authority which tended to rob him of his birthright of free judgment, opinion, and action. This point of view has now been largely reversed without being bettered. Into the writer's hands has but recently come the program of a religious conference which carries as one of its topics: "The emancipation of modern life from religion." Apart from the treatment of the theme by the assigned speaker who was friendly to religion, the concept of God has been by many minds discarded, or the question could not have been put so boldly. In the place of God we have substituted science, or Man (viewed as the only God there is), and dreamed of moral and spiritual functions with no deeper sanctions than man's own philosophy, unattended by the indwelling presence of the Creator of all spirits and of all worlds. Under these circumstances there is need for the rediscovery of the person, the person as related to his highest capacity, and related to the Father of Spirits. Without God, man is a truncated pyramid, and a very lowly one at that. He must reach out beyond himself and the day's thoughts and achievements into an infinitude of possibilities. This he cannot do without the God concept and faith. Man's highest nature is also his truest nature, and this truest nature is one with Divinity itself, a manifestation in time of the Eternal God, the measure of all things.

Our Divided Civilization

The figure of the Roman god Janus would provide an appropriate symbol for the divided culture and counsels of our times. The god was represented as having two faces, looking in opposite directions.

There has perhaps been no time in human history when world-views presented sharper contradictions than now. We are moving about in worlds unrealized, and with but little sense of direction. Favoring autocracy, we praise democracy, meaning thereby rule by *our* class, clique, kind, or opinion. Under the spell of a word we scheme to keep in power "the right people," such as "the taxpayers," the military-minded, "the friends of labor," or any one of many special interests. We talk of socialism, when the concept we entertain is the detailed regimentation of the many for the benefit of the few. We commend altruism without dreaming of the physical and moral sacrifice which its realization involves. We commit ourselves to great social hopes but draw back at the only means, the spiritual, by which they are to be achieved. We dream of procuring loyalty by forcing men to salute the flag, or to repeat patriotic formulas, in much the same way that the people of another age secured orthodoxy by compulsion. Professing to break with forms and traditions, we have done hardly more than to set up new ones, new little idols as futile as the others, and exalted into the places of the old. We deny the miraculous at the very moment we participate in the miracles of radio and television, which we know enough to use but cannot explain. We are no longer moved by these vaster discoveries as Morse was moved at the success of the telegraph to send the first message: "What hath God wrought?" We can tell scientifically *what* will happen, without thinking to ask *why*, because we do not realize the spiritual nature of the universe. In the meantime, with all our egotism, we assess little credit to the woebegone creature called a person, esteeming him among the least of all things. We look upon his most distinctive power, the capacity to create moral values, as if this fact about him were negligible. Our prophets of materialism proclaim a new authority, that of science, as if science could receive authentication independent of man. Morals are bowed out of the materialistic world and the weak become the slaves of the strong. The strong are the most scientifically advanced, who can make the cleverest machines of destruction, though in the making we are betrayed. This new absolutism of science is but an echo, the mad child of an older religious absolutism which forgot the inviolable nature of the person and the essential character of freedom. All types of absolutism possess a common feature, contempt for the individual; all exhibit a common cruelty in dealing with individuals.

The hope for modern culture lies in the persisting spirit of democracy, certain essentials of which receive scant consideration. Too much are we obsessed with fear

> . . . to off-cast
> Our moorings from the habitable past,
> And venture chartless on the sea
> Of storm-engendering liberty.

The underlying essential of democracy thus realized by our founding fathers was taught by the Greeks, and in yet nobler measure by Judaeo-Christianity: the intrinsic worth and sacredness of the person as the foundation of the social organism. This unassailable truth has as yet been only falteringly and partially accepted even by the professed democracies. Democracy means the right of every man to the fullest opportunity for self-expression consonant with the general good. Democracy is strong to the degree that it realizes this ideal. We do lip service to the principle even while we resist its application in practice. We trust democracy for ourselves, while we deny it for others.

Thus democracy presents the anomalies and conflicts characteristic of life itself, because, founded in the life-interests of persons, it continues by progress and change, seeming always to die in order to live. It must yield its present form as inevitably as the grain of wheat that falls into the ground that it may achieve a larger life. This is the supreme law for living things and may be taken as an indication of the natural character of democracy, a token of its persistence and ultimate triumph. Democracy is not so much an achievement as it is a process, a way of life, a growing dream, a flying goal that recedes as we approach it. No set organization can insure it, for it must press forward to the accomplishment of newly discerned human rights with ever-increasing crescendo, if it is not to lapse into the tyranny it professes to escape. It grows by the measure of men's souls, and must seek ever-higher levels of expression. These facts indicate the greatness as well as the weakness of democracy.

We thus have the picture of the innate contradictions of our time in a struggle to escape from authoritarianisms that would bind the human spirit. We are engaged in a war against the lag and inertia that in our day fears to strike out toward new moral and spiritual objectives, as we attempt to satisfy ourselves with the husks of material achievements and discoveries. Opposition comes not alone from the enemies of decency, but also from those who are so comfortable in body and mind that they oppose change at any cost. It is like the hesitancy of the father to replace his son's outgrown suit. It is no more a struggle against the harebrained schemes of doctrinaires, who would erect a universal principle into a strictly class

benefit, than it is a combat to secure a fair chance for the forgotten members of society. We approach a parting of the ways which demands a clarification of our concept of democracy, and this can come only with a new and profounder appreciation of the person, and the world as a world of persons.

Contrasting Concepts

Some enlightenment on the situation is to be gained from a review of the historical process by which we have arrived at the present state of affairs. Western society has its cultural roots in the Orient, which represents the older civilization, and which for that reason has exercised a restraining influence on Western democracy. Contrasting concepts have created a divided allegiance. By Oriental culture is meant specifically those ideas that have dominated the thought of India and China, and have permeated the common thought of East and West.

This culture has emphasized form and embodies a geometrical concept of life and society. Every kind of Western perfectionism is in some way related to it. The notion involved is at the base of totalitarianism, political, social, philosophical, or religious. If the social order, either here or hereafter, is pictured in terms of unchanging perfection, a "pattern laid up in Heaven," it bears analogy to geometrical construction. If, for instance, the organization of Heaven and earth is conceived under the Dantean symbol of the circle made up of countless points representing individuals, the individual becomes nothing except as he is a part of the whole. Let a single point wander from the perfect arc and it ceases to possess significance. There is no room for individual enterprise, differentiation, initiative, or freedom. The whole system is struck with an eternal sameness, the quietude of death. He who is an indistinguishable point of the circle and elects to move out of it becomes an immediate outcast. Crowded populations lend themselves to such a concept of social organization, the characteristic of which is that the individual exists for the institution, but the institution does not exist for the individual. This idea became emphasized in the Orient no doubt by the increasingly crowded conditions which followed on successive immigrations with few outlets into new territories. Social forms became ever more firmly set, events took on the likeness of predictable patterns. Thus the cyclic theory of history came into being. Events were seen as dominating cycles that rose and fell with the regularity represented by the turning of the Binary Wheel, with which idea the Buddhists captured the imagination of the

Chinese. Change came to be looked upon as impossible or illusory. The spell of form, authority, and changelessness, influenced Western thought through Plato, Plotinus, Hegel, Nietzsche, Marx, and Spengler. Every Utopian in Western literature dipped his pen in Plato's ink, and every absolutist theologian from Plato's day to our own owed his concept to the developments that arose out of the Platonic system.

Western society was, however, by the exigence of events, committed to a contrasting view of history, which made the Platonic concepts exotic. Western societies were migrant, springing from nomadic tribes which pushed ever westward through centuries of changing and unsettled society. They looked to a golden age which was yet to come, and toward which they hopefully traveled. Since their present condition was lacking in the amenities they sought, they anticipated an ameliorated future. Instead of seeing things under the cyclic concept, the linear theory of history seemed to present the natural order of occurrence. The better condition was yet to be found "over the ranges" or beyond the seas. This nomadic spirit ruled not only the Scythians, but the Jews as well, who from the days of Abraham's departure from Haran to "seek a country," have been the world's greatest travelers. These men deliberately broke with their past. There was no returning cycle of circumstance that could draw them from the dream of a "better" country. For them the line of history, like that of mathematics, was made up of an infinite but indispensable number of points. These points represented individuals, who, if they chose to step out of the line carried the line with them. It might thereby become a crooked line, there was no inherent demand for straightness, but it was never completed and its characteristic was always, advance. The arithmetical progression emphasized, not the form of the line, but the place and the importance of the individual in the continuity. No point that made up the line could be omitted without breaking the line, and was important to the whole. Such was the principle on which arose the structure of Western democracy and Western science as well. It was the progress of arithmetic, as against the fixedness of geometrical form; change as against staticism, individual sovereignty as against authoritarianism; democracy as against totalitarianism.

The Person—Basis of Democracy

These two concepts are still at war among us. The great conflict through which we have passed, and whose issues are still undeter-

mined, rests upon one of these alternatives. As the world grows smaller, its problems more complex, we shall move either toward greater democracy or greater totalitarianism. As Lincoln visualized the American nation incapable of existing half-slave and half-free, so the present world offers a like alternative. The present choice is between the one or the other, but democracy calls for a moral and spiritual maturity in man which is envisioned only by a mighty faith in the person.

Recent advances in the development of scientific theory make possible a new emphasis upon this fact Discoveries following the wake of the theory of relativity emphasize the importance of the person who observes the world, the reality of which accords with a frame of reference of man's own choosing, and based upon the fact of man's own nature. Modern physics tends to draw attention anew to the dictum of Protagoras, that man is the measure of all things. What we can know of external reality is seen to be personal interpretation of phenomena depending upon the capacity of and relation to the observer. The suggestion immediately forces itself upon us, that to change the nature of man would be to change the nature of the world. Meaning itself is but the substance of personal reactions. The discovery of "the principle of uncertainty" has disrupted the static assurances of physical causation and left many a physicist gasping for intellectual breath. One such, in high place, recently declined to affirm either the reality of the atom, or even of his own existence, and yet proudly dreams himself to be a materialist. The concept of the atom as a force or activity has dissolved the basis of materialism into disillusion and nothingness. The movement of modern thought, both in science and in philosophy, is toward a new appreciation of the person, of his worth, his validity, his outstanding reality. Against the growing momentum of these concepts, the older totalitarian and authoritarian casts of thought begin to look as outmoded as the snows of yesteryear.

It is just not in the nature of things that we should be able to crowd the hatched bird back into the shell, or to re-imprison the butterfly in the spent cocoon. Benevolent assimilation is no longer good politics, as Norway, Yugoslavia, Denmark, and the Asiatic Co-prosperity Sphere attest, nor can it prove profitable for France, Britain, or the Soviet Republics. The good of the head of the column demands the bringing up of the stragglers in the rear. In a world grown so small, it is no longer possible to tolerate morally backward peoples, whether they dress themselves in the sheep's clothing of science, religion, or civilization to hide an inherent barbarism, or

whether through no fault of their own, they have been left out of the reckoning and dwell in the kraals of Africa.

The Way Out

The most important question of the hour may be this: Is there any way out of the present situation short of recourse to the totalitarianism we would escape? Force, violence, unquestioning obedience are the powers by which totalitarian institutions have erected themselves. Can the impact be met in any other ways than by force, violence, and unquestioning obedience? This dilemma is the tragedy of the present hour in human history. The way in which we respond will determine whether the future society shall be democratic. The problem has not been settled conclusively by the defeat of totalitarian armies in the field. It is said that once democracy is compelled to resort to force, there is no difference between her and her one-time oppressor. But there is a significant difference. Regimentation on the part of a democracy is a self-regimentation of free men for the good of all: if not by personal consent, at least by majority vote. With the existence of free and untrammeled expression such regimentation may retain the heart and soul of democracy. The basis of democracy lies in the self-restraint of its citizens. In a state in which men have respect for the law because it is in keeping with the general welfare, and only in such a state does freedom become possible. The law-abiding spirit of its people makes possible a government with a minimum police force and army. This spirit must now become world-wide and international if democracy is not to perish.

The future of democracy, in the light of these reflections, dependent upon the enlightened morality and unselfishness of its citizens, demands the assistance of genuine religion. Why religion? Because a temporary camaraderie may be established between criminal gangsters. Such associations, however, have this weakness: continued loyalty depends upon continued success, satisfactory division of the spoils among men who by the nature of their wants cannot be satisfied. Civil war soon breaks the temporary amalgam. Social partnership, to be permanent, must be based on the highest motives, such as can command the admirations, the emotions, the souls of men, such motives as are worth dying to preserve. These motives cannot be had outside of religion. When a man is willing to sacrifice everything for the sake of righteousness and justice he is essentially religious. In contrast, if he puts personal selfishness above the common good he is essentially irreligious in spite of professions,

beliefs, or mystical experiences. Devotion to righteousness is the principle that cannot be divorced from religion, finds its place in all true religions, and offers a point of contact and understanding between them. What claim does every man in the world have upon me, demanding the possible sacrifice of my ease and comfort? What establishes his claim upon me for the rights of democracy? Why does this reach the plane of religion? In the last analysis his claim can be recognized only as I discover in him the same relation to an impartial God that I assume for myself. We are the children of one Father. Each of us bears an intrinsic worth and possibility by which we are potential contributors to the Great Society of which Josiah Royce once wrote. This principle has been lifted into religious significance and made the heart of religion by Christian teaching. The inalienable human rights are emphasized, such as life, liberty and the pursuit of happiness. The least of men forms an indispensable link in the continuous chain of human rights. If in a single instance these are denied, the whole structure of society is weakened. That the social structure may be strong, the state must afford full opportunity for self-development, self-expression, to each citizen his rightful place in the body politic. Of all organizations, democracy can least brook the presence of "submerged classes."

The Protagoran dictum that "man is the measure of all things," and the prophetic insight of the New Testament Seer that the City of God must accord with the measure of a man, both touch the heart and core of the present problem of democracy.

CHAPTER XXXII

"Let's Break New Seas"

A PURBLIND AGE fancies that it is done with philosophy, and that it sees affairs from a realistic, and above all, from a "practical" standpoint. In this it is self-deluded, for no period has perhaps been more hag-ridden with strange ideologies. Momentarily these have seemed to be driving us down a steep place into a sea of barbarism and disaster. Never have there been more philosophies afloat and accepted than at present owing to the widespread state of education. The educated mind, denying philosophy, yet cannot resist asking philosophical questions and attempting to answer them philosophically, in spite of all disclaimers. A needed skepticism is in the air but attaches itself to the wrong spots of the garment of intelligence. A ponderous book could be written on the credulities of an age proud of its incredulity. Incredulous of many things, we are prone to be overcredulous about others, just as the learned man may be the most easily taken in at the sleight-of-hand performance by very reason of his theories and prepossessions. Strained attention and skepticism may easily become the best ally of the prestidigitator.

In our pursuit of what we call twentieth-century knowledge, we have too often lost our sense of perspective, trying to live wholly in a one-dimensional, or at most in a two-dimensional world, in spite of our common talk about a fourth dimension. In our fear of dogma we have replaced a systematic view of the world with a disjointed and fragmentary cosmos of overemphasis and underemphasis. In other words, we cultivate certain blind spots in our world-view where religious, spiritual, or personal aspects are involved. Recent discoveries in the field of science which promise to revolutionize the physical conditions under which we live, have carried us away with an enthusiasm untempered by a consideration of important underlying facts. We have been persuaded into the fond imagination that we can have a new world of freedom erected chiefly upon gadgets and organization, without the drudgery of rectitude, moral responsibility, sacrifice, or the cultivation of the inner life. Yet from these latter issue the supreme values of freedom, happiness, and an

ordered society. Though we learn to turn the waters of the sea into gold and spin its sands into silk, or transform the foison of untended fields into vitamins; though we banish space and absence by television, to hear the voice and even to see the face of a distant friend; though we take the wings of the morning to seek out the uttermost parts of the earth, we cannot escape the old discontents, miseries, and heartbreaks. The sources of our disquietude must be recognized as from within. It is high time for us to be asking new questions concerning man's inner life, where alone is the secret of peace. It is in this neglected kingdom of the person that we need to break new seas.

The daily advances of science make more impossible a return to the little world of isolationism and of parochial outlook. However much we weep, the angel with the flaming sword guards the gates of yesterday, and we may as well make up our minds to earn our future bread in the sweat of our faces. If we are to have a better world than that we have left behind, it will be necessary to break new seas of spiritual effort and understanding, since only so can a new world come. The only alternative is continuous and global war. Unfortunately, the fast-multiplying inventions of science are putting more lethal weapons into the hands of unscrupulous and wicked men. There is just one field of understanding where all men may unite, the religious respect for the sanctity of the individual personality, the intrinsic worth and dignity of every person as a child of God, real or potential. Herein lies the spiritual resource at the heart of the religions, providing the way to mutual endeavor, and disclosing a power to remake the world. The tolerance and the insight called for, however, is nothing short of revolutionary. It is based on world-wide recognition of righteousness wherever it exists, without respect to divisions, traditions, and exclusiveness. In this Christianity as a universal religion is called to lead the way. Dare we break new seas?

The most important thing about a man is not the gadgets with which he is able to surround himself, but his philosophy and the depth and breadth of his spiritual insight. In the mind and spirit of man lie the sources of greatness. Yet we have tried to build a world by sedulously weeding out as unessential, the inner, creative, life-giving spiritual convictions and realities. We have, figuratively speaking, tried to get along without certain spiritual vitamins necessary to every normal life, for religion is not the luxury of the few but the required sustenance of every representative soul. Nothing is more certain than that we cannot attain a normal human life

in a state of spiritual starvation, yet it is popularly considered a token of ignorance and bigotry even to mention the soul in polite society. We have babbled of freedom with little sense of the spiritual conditions of freedom. When Rousseau wrote the startling sentence: "Man is born free, but is everywhere in chains," he awoke the slumbering spirit of democracy, but he had little consciousness of a deeper and more abject slavery than that symbolized by the autocrat of the Louvre, or the oubliettes of the Bastille. Neither he nor those who came after him gave thought to the spiritual emancipation which was necessary to world freedom. Man is everywhere in chains, because he has not conquered himself, and laid that conquest at the feet of the general good. Freedom is from within.

We seem now to have reached the breakdown of the customary complacencies in a world as notable for the destruction of old shibboleths and watchwords as for the devastation of the shrines of ancient civilization. Whether or not we like it, whether we rejoice or mourn at the passing of the old, we are forced by circumstances to build a new world. For this we must bring our moral and social achievement up to the standard of our scientific discovery, but a new world of some sort is inevitable. It may be either much better or much worse than the world we have known. If we miss the present opportunity we can only turn back to the savage wilderness of lost hopes from which mankind seemed emerging so slowly and at so great a cost. Is the task too great for our present-day minds? We have but a little window from which to look, but it opens upon the vastness of the universe and is mirrored in the depths of our souls. We must turn again to the heart of man as the oracle through which God may speak. Only so shall our darkness be lightened. We have too often looked for light in the places where it is not. Let us now reach out to the capacity to look out upon our world as a spiritual universe, of which each man can, in some sense be the expression, and so to catch the murmur of a common language with which all races and religions are familiar.

Our Vanishing Compartment World

Builders of international conferences have usually been made aware of the ticklish problem of precedence in making up programs. A misstep at any point among European delegates has always precipitated ill feeling. This compartmentalism of men of different nations was but a straw in the wind forecasting the madness ready to seize the western world in a paroxysm of mutual destruction. Means of communication, travel, trade, news, and dis-

cussion had already outgrown measures of cooperation. One or another international conference, even of philosophers, lacked representatives from dissenting nationals.

This isolationism, though an inheritance from the past, is not only apparent in the affairs of nations in a world now grown so small that seclusion is no longer possible; it is evident also in the world of ideas. In a world so intimate we cannot avoid the impact of each other's ideas, we foolishly dream that we can shut them out by closing our eyes and minds or by repressing them. Ideas must be frankly met and considered and encountered by better ideas. Our compartment world is already gone while we still pray for it to stay. Such a prayer has expressed itself among the multiplied sects of Christendom where groups of Christians have denied to other groups full standing with the Almighty because of practices and opinions that have no relation to ethics or morals. Trying to shut out other people's ideas is no longer practicable. Decades of effort on the part of liberal-minded churchmen to win to common grounds of cooperation have been discouragingly futile. Many so-called liberals are as allergic to fraternization as the conservatives. We fear the contamination of each other's garments. We still hear the surprised remark that so-and-so is a Catholic, a Jew, a Methodist, a Presbyterian, a Quaker, a Unitarian, or a Mormon, and "yet seems to be intelligent and ethical." The tragic aspect of this dismemberment now is, that with division in the ranks, Christianity is faced with the infinitely more difficult task of drawing her circle wide enough to embrace and acknowledge the good that appears outside Christianity, and to claim a common cause with all men of good will who, according to their lights, would please, serve, and love God. There can be no honest denial of the sincere struggle of other faiths toward a life of righteousness and love, the service of that God who, we are told, is no respecter of persons. The common thread of aspiration after righteousness, rather than theological opinion, should have provided and can alone provide the ground of common understanding and sympathy. Instead we have made opinions the basis of religious wars, insisting that righteousness and love were inferior to mental beliefs. This attitude is a negation of human psychology as fatuous as an attempt to reverse the tides. The more complete the faith in the universality of the Christian religion, the more genuine the belief in Christ as the center of human history, the more ready will Christians become, to meet and cooperate with other faiths on the solid ground of comparative ethical accomplishment. Here is the acid test of religion. The refusal

to acknowledge good in others, the over-haste to defend theological dogma, is a sign not of faith but of wavering belief. It is an expression of fear that we may not be in possession of the truth, or that the truth is not strong enough to prevail.

A similar compartmentalism is observable in the fields of education and science. In these realms, compartmentalism poses as "specialization," claiming superiority by its very limitations. The tendency is to drop into the idea that the less general the knowledge possessed, the greater the likelihood and extent of acquaintance with a specific field. Specialization is often begun before a liberal grounding is given with the resulting professional parochialism. Half-trained, narrowly trained men essay the role of teachers, fill legislative halls, or bungle international relations. Science has too often in a mood of supremacy climbed into the ivory tower of independence of moral issues with a smugness that is only now passing away under the shock of atomic destruction.

Philosophy, which if it had kept itself free from compartmentalism, might now hope to be the interpreter of a new world, waits in shamefaced self-humiliation for whatever crumbs may drop from the scientific table, though far behind the thinking of the great scientists, while it despises religion in the same degree that it is despised by science. What is not generally recognized is that compartmentalism is obsolete.

Religion, science, and philosophy exploit mutually dependent ideas and each is affected by the others. There is no strength in the belief that there is no relation between a man's philosophy, religion, and his scientific conclusions. These invariably influence his interpretations of reality, his attitude toward the fulness of truth, his mental honesty. The present bankruptcy of materialism is to be found in the confession of its former protagonists that without the assumption of a Supreme Causal Intelligence explanation is impossible. The scientist comes something short unless his devotion to the clear light of truth acquires the quality of religious devotion, as in the life of the late Louis Pasteur. Only lately has our scientific compartmentalism become clear through the revolution in scientific theory. The insight had for a long time been waiting for expression, but to such an extent had materialism warped our judgment that we would not listen. The broaching of the doctrine of relativity brought many disparate ideas into juxtaposition, and caused many to grasp for the first time the fact that all truth and all reality are relational. Such a concept could not but be shattering in its implications for every department of human life and thought.

From External to Internal Concepts

That the new scientific concepts have such universal significance is a notion already bitterly challenged by the retreating cohorts of materialism. The revolution in the concept of matter from that of a reality consisting of mass, extension and inertia, to one that is defined as activity, could but have sweeping implications for both philosophic and religious ideas. The concept of reality is basic to all thought and interpretation, and influences all. To describe the atom as "an event in a space-time continuum" calls for a "time-binding" subject of experience for verification, and demands a philosophy of personalism. Does this seem but the conclusion of a wishful thinker? A continuum which gathers past, present, and future events into a synthesis of meaning demands a perceiving intelligence persistent and self-identifying throughout the process. To persons and to persons alone is such a continuum possible. Events never "continue in one stay," but succeed each other with a rapidity swifter than thought itself. The continuum is the meaning that time-transcending persons gather from the succession of events which endure but for a moment. The permanence of fleeting events is in the meaning, and in the person to whom the continuum has a significance, and to the Creative Intelligence that grounds the whole process of existence.

We have been long in arriving at this understanding of reality, held back by our slowness to surrender accepted concepts of a divided, compartment world in which thought and even personality appear alien to reality. So long as the real was considered a matter of externality and inertia, we could make little progress in explaining the world because man, the greatest enigma of all, remained to be accounted for, not on the lower reaches of his physical existence but in the higher realm of mind and spirit. Yet man is the chief ingredient of reality, short of God, and without these the universe is inexplicable. If we decide that the chief property of reality is matter, that is mass and inertia, we might be able to make a machine expressing the external forces, but we could in no such way illustrate the living reality which science now conceives as a force in every clod. While we remain unaware of the inner potentialities we have scarcely scratched the surface of reality, because the main facts about reality are activity and life. At this point man is himself discovered as a non-negligible portion of reality, fitted to cooperate and to command in a universe to which he is in every aspect related. His task is to marshal the countless hosts of living

activities that swarm the sea, the sky and the air, and the very earth under his feet. The new scientific concepts have carried us from a dead and static world to a living world in which all is life. Let no one think for a moment that the revolution thus achieved in human thought will do less than bring a revolution in the whole realm of human activity.

While we have stumbled along in the grip of an external ideology, incapable of explaining life and mind, we have blundered into the doctrine of a purposeless evolution, satisfied with the merest clue to our problems. Forced to make out that evolution proceeds by changes in external environment, we have so many gaps (missing links), that a candid science has now been forced to abandon the doctrine as nonexplanatory. The main factor in evolution is an inner response, the conquest of enviroment and circumstance by the inner forces of life. Development from lower to higher demands the presence within the cell and the atom of an urge or inspiration on the way to realization. Evolution, devoid of purpose, is unintelligible and self-canceling. When the process extends through millennia, we must assume a Supreme and Transcending Intelligence in and over all, or we must endow the simplest atom with a complete foreknowledge of all time and all existence.

The task of the newer science is to discover these hidden powers in a world which is altogether relational. We are increasingly aware that the "brute facts" of life would take on a revolutionary change with the mere raising or lowering of human sensation, such as might appear were we to become directly conscious of either ultraviolet or infra-red rays of light; or if we could see through an oak plank without the aid of the Roentgen ray. The most substantial facts are now seen to be relative to very limited sense perceptions. The spiritual vision and insight of the real mystic are hardly less remarkable than the disclosures of the electron microscope. The meaning of reality becomes more and more an interpretation of human experience, and it cannot be confined to sense impressions. To bring a new world into being we must learn to organize and foster the inner life and consciousness. We must understand its relation to outward fact. We should give over the dream of changing the world by force, compulsion, and regimentation. The sword of St. Michael and all his angels cannot compel a violent man to love and to seek peace. The reform of the social order must spring from an inner love and devotion to right, justice, and freedom. True democracy is an affair of the inner spirit. It must come to birth as the inmost desire of the multitudes.

The New Era of the Person

The foregoing facts point to the necessity of a new concern for the place of the person in the role of social, political, and religious life, and even as a part of Nature herself. In the future the most profitable study is to be of man himself. We shall turn from an almost complete absorption in animal psychology (in order to get information concerning man), and even from a study of abnormal and pathological man to seek more light upon those inner resources which are possessed by the normal man, and which make him great. We shall not begin by a denial, in the interest of materialistic dogma, that man's higher nature is his real and normal nature. Wise horticulture does not confine itself to subnormal or diseased specimens. The new psychology must justify itself by giving us the clues to genius, to self-control, to creative effort and to sainthood. This would be far better than to become "procuress to the Lords of Hell" by teaching the young that there are irresistible physical impulses but no morals.

We shall not have gone far in such a course, before we shall realize the necessity of religion in the sense of the term we have here been using. The psychologist may need a little self-examination lest his prejudices, his opinionativeness, and his moral weakness obstruct his scientific disinterestedness. He must then stick to truth as saints stick to their concept of God in spite of Hell and high water, but neither saint nor psychologist will be able to do this without religion. In the last analysis, religion is not a system of beliefs but a personal relatedness, a harmony with the cosmic order made up of God and other men and himself. To realize one's place in the universe is also to come to a true relation with God. The foremost religious task is then to establish *rapport* with the whole round of scientific, social, and personal facts. While religion is essentially a personal commitment to the highest human capacities, it calls for a concomitant philosophy. We must have the glow of imagination and insight, which are the distinct gift of religion, but we need also a philosophy that comprehends the relatedness of the person to his whole environment, physical and mental as well as spiritual: one that rings true to life and facts, and that brings science and religion into working agreement. Within himself, within his imagination and his love, man must first find his world before he can create a new world. "Out of the heart are the issues of life" is an old adage, but a true one. Where a man's affections, longings, and ambitions are, there also will be his future and his new world.

Let's Break New Seas!

With the passing of materialism in science announced by Dr. Millikan; the disappearance of "particleness" from the particles of Dr. Swann; the evanescence of the concept of causality from the system of C. G. Darwin; Kemble's insistence that the future field of physics is the inner world of experience; the assumption of Max Planck that reasonable explanation demands the presence of an Ideal and Omniscient Spirit; of Arthur Compton that belief in God is the scientific attitude[1], we are ready for a new system of philosophic concepts, to keep pace with modern thought.

To this end a developed philosophy of the person must be effected to provide the highway of advance to a new world of freedom, creativeness, and understanding. We must start with selves rather than with institutions, for no mere institutionalism can insure the moral order which only moral persons can create. Everywhere there are persons, and everywhere they form the necessary objective of effort. Science must disclose the resources within the self, for the mastery of the self and the control of nature, while religion must provide the insight and the incentive for that control. If there is to be a new world, these inner resources must be allowed full mastery in man, and society must see the necessity for the general culture of the spiritual. No longer can we hold neutral positions when moral and spiritual issues are at stake. No government can afford to waste these most precious of its resources through indifference, tyranny, or want. Since the highest of these resources are the spiritual, and directly connected with creative insight, each person must be seen as sacrosanct from any invasion of his personality that degrades his self-respect. Such is the only platform on which an eventual democracy can persist and increase. As every atom is essential to the continuum of the universe, each person possesses some gift which, rightly used, will contribute to the welfare of society. For that reason a true democracy is the desideratum of political organization.

More profound still is the insight that every flash of genius, every stirring of understanding, every expression of love and sacrifice is due to the inspiration and reincarnation of the Creative Spirit, on which the whole cosmos depends. Wherever, then, we find the expression of unselfish love we need not deny its divine character because it is not attended by our own theological views. God has not "left himself without a witness" in any nation or age of man. Any

[1] *The Human Meaning of Science*, University of North Carolina Press, p. 66.

strivings after righteousness, or conformity with the Divine Will as understood sincerely, must be acknowledged and recognized at full value as inspirations of the Divine Spirit. Once the religions of the world approach each other on this ground with a competition in righteousness, justice, and truth rather than in the philosophical expression of dogmas, doctrines, and ceremonies that grow from racial or national traits, we could at least agree to work together for common moral aims. There are many points of practice in which we could collaborate for the benefit of the world. The question of the hour is whether we are willing to forsake our prejudices, seem to risk the institutions that are dear to us, for the sake of common understandings and world-wide religious cooperation. Christianity with its dream of universalism, with its belief that Christ is the central figure of human history, is called upon to be the first to break new seas.

IV

THE PERSON OF PERSONS

CHAPTER XXXIII

The Supreme Continuum

WE HAVE ALREADY CONSIDERED how necessary to the concept of a continuum is the attendant assumption of an existence of some kind which does not pass with the fleeting events of the series. The synthesis of before and after, the correlation of past, present, and future demands a self-referring subject of the vanishing experience. Personality is the inalienable factor in any continuum. When we come to the continuum of world creation, or to that which is so visualized in the doctrine of evolution, we are compelled by consistency to assume the presence of a self-conscious intelligence which existed before the beginning, and which foresaw the culmination of the process. It may be considered to have been immanent in the process. If, at this point, we are challenged on the ground of entertaining contradictory notions, it will be sufficient to point out that immanence, united with transcendence, is a portion of the experience of every creative person. The picture you paint is an expression of your innermost self, if it has the mark of genius about it. It speaks of your education, your reaction to life, and form, and color, in a way peculiar to you. You may be said truly to be immanent in the work. But as a person you are also transcendent of it. It is not you. While your personality has conspired to make it, the making has added to your skill and to your artistic concepts, and you might make a hundred more and better. Immanence and transcendence come together in personality and nowhere else. This contrapletion, as John Wright Buckham called it, is peculiar to creative effort. The superlative union of immanence and transcendence is called for in the Creative Force, Energy, *Elan*, God, or whatever works within the time-order of evolution. This interpretation is all the more necessary if we are to conceive the atom as an event. The world everywhere, both in its physical and in its spiritual aspects, presents us with constant change, life, growth, and movement, but change could mean nothing to any subject incapable of transcendence in some degree. A succession of events displaying the presence of an evolving purpose, covering uncounted millennia, demands a super-subject of experience, both immanent and transcendent, a Supreme Continuum, or God. There is no other

prospect of cosmic explanation. Unless this is reached, we must abandon altogether the theory of evolution, and with it a great field of scientific hypothesis. As the scientist Hermann Weyl[1] has indicated; the ultimate answer to all being, lies, outside of knowledge, in God alone.

The Absolute and the Finite

The full meaning and implication of the change from materialistic monism in science, and from spiritualistic monism in theology, is not yet apparent to many, perhaps not completely apparent to any present-day thinker, but the readjustments for which it calls are very great. Materialistic monism has worked itself into a dogma, which if consistent with its own premises, denies the existence of mind, spirit, and God. Spiritualistic monism, on the other hand, if logically consistent, would consider the whole objective world an illusion. If one is to cling to monism, there is no choice between the two alternatives, and one is impaled on one or the other horn of the dilemma. In popular thought, the gap between them is bridged by a form of words, an ambiguity which bears within it a contradiction. In materialism, absolute reality is the back-lying substance, or noumenon, that throws off qualities, but is in essence forever unknowable. Spiritualistic monism places reality in an inconsistently personal Absolute, which stands apart from the world of its creation, since the natural is considered the violent enemy of the supernatural. Now, Absolute is one of those extreme words that cannot be used without blunting its meaning. Etymologically it means, free from all relations, entirely unconditioned. Since we live in a world of relations, and can know nothing and express nothing of that which is unrelated, any use we make of the term that can carry an earthly meaning will bear within it a contradiction. Any way we use it, our Absolute becomes a relative, or related absolute, and in spite of the incongruity this has become the common usage of the term. This ambiguity leads to serious results, both in philosophy and in theology. The notion of the Absolute is scarcely indigenous to Christian philosophy or theology, but is, rather, an inheritance from Greek thought. As the Greek materialists from Democritus onward endowed us with a materialistic monism, so Plato and Plotinus, with their roots in the Oriental philosophy of the Hindu and of Zoroaster, gave us the concept of a spiritualistic Absolute. In the Orient, undisturbed by Western realism, the outcome of the doctrine of the Absolute was the search for Nirvana, in which per-

[1] *The Open World*, Yale University Press, New Haven, p. 28.

sonality should be swallowed in oblivion, and this because the Indian thinkers had little difficulty in thinking away the objective world. In the Occident, the Oriental concept has lingered in spite of the involved paradox. It could not have survived among us had not the original implication of the term Absolute become subtly changed in usage, and we did not think deeply enough to see the inconsistency. Any spiritualistic Absolute must include the world of matter, either as a pantheistic demiurge, or as an illusion and nonentity. Western thought has never been able to make the complete break with the world of objects. What the Western thinkers have meant by the Absolute was that it is a term of perfection to describe a Being, infinitely more powerful, wise, and great than we can think, omniscient, and omnipresent, utterly holy. We have not often paused to ask how these terms could be invariably true in a moral world of freedom and change. As a matter of fact, any Absolute would become limited and related by the very act of creating the world of time and space. Above all, if such a world were characterized by the possibility of moral freedom, the creative Absolute could not avoid responsibility. If this thought strains at faith, it will be well to recall that the deep meaning of the Incarnation was self-limitation, and anyone who believes in the deity of Jesus should have no difficulty in believing that self-limitation is one of the leading characteristics of God. Creation is the expression of one's self, and the making of the world would be an act of voluntary self-limitation. The possession of personality by an Absolute is impossible, and if we are to cling to the extreme idea, the Hindu philosophy presents the correct philosophical conclusion. To be like the Absolute would be to become completely depersonalized, unhuman, unrelated to the world of sorrow and experience. The assumption of the deity of Jesus is at utter variance with a consistent doctrine of the Absolute. An immutable God could have neither part nor lot in a world of change not to press further the concept of a suffering God. If we are determined to cling to our thought of God as an Absolute, we must dismiss the notion that he created the world, bears any relation to it, has any interest in it, suffers in it, or could be incarnated in a historical figure. To give over the extreme dogma of an Absolute is not to consider unessential the struggle after such perfection as the human mind can conceive, or the human will can achieve. Our human limitations bar us from any understanding of Absolute perfection. The comprehension of perfection grows with human attainment, and it never appears what we shall yet be. In a way somewhat analogous, the mathematician

must hold to the effort after infinity, though he never quite reaches it, in order that he may arrive at the very relative and practical results that the aim for infinity achieves. The complete devotion of the religious man to the fullest perfection of which he is aware is essential to his best effort. To attempt less than this is to lose his soul, but the dream of moral perfection is never absolute, being conditioned by the temporary understandings of each individual.

Pre-protoplasmic Consciousness

If we are to consider the world as divinely created, and physical evolution as an expression of a divine order, we should frankly ask ourselves, where in physical creation the Divine first begins to manifest itself. In examining this problem, modern physics lends an emphasis to spiritualistic philosophy in describing materiality as the result of activity, as nothing but activity, which we interpret in the terms of common understanding. Immaterial forces or energies by their activities provide us with the notions of mass and extension, somewhat as the grip of an electric current seems like a heavy hand laid upon us if our hands complete the circuit. How this immaterial force can give us the impression of matter, or how the immaterial can hook up with the material is a great mystery, inexplicable from the materialistic standpoint, but a common enough experience. Your very immaterial choice of courses of action acts upon brain, nerve, and muscle, to lift from the table the heavy volume you hold in the air. You may admit it is inexplicable, but you have to admit it as a fact of experience, in spite of all the behaviorists can say. A world, made up of energies, a world of events working toward a goal such as the creation of the planet Earth, and the preparation of it for animal life, we must assume exhibits the presence in the very beginning, of an element which was something other than matter, or atoms. This inner urge of the primeval atom can no more be identified with the purpose that created it than the artist can be altogether identified with the picture he conceives and paints. We must posit a psychic presence in the atom, urging to an activity foreseen not by the atom but present in the Divine purpose, even as the cells of your brain and the muscles of your arm are not themselves cognizant of your purpose, but are only obedient to it. The scope of action is greatly extended when we come to the cell. Before this tiny bit of protoplasm could come into being, there must have been pre-protoplasmic consciousness. The physical elements of the cell can be easily determined, for they exist throughout nature. Though we match the exact chemical constituents we have

never made a cell. Here is a synthesis of atoms, endowed not only with force and direction, but with an organism and sentience. The psychic element is here intensified, for we have clearly that which no combination of chemical elements has, of itself, ever produced, nor do we have any reason for assuming that it could be produced without the intervention of purpose. This hidden power of life shows urges of extension, of adjustment to environment, a beginning of individuality, which is to seize upon the atomic world and compel it to do its bidding. The cell masters the atom to the fulfilment of its own life processes with a growing contingency that betokens at least a limited self-consciousness. The cell has the power of refusing what is not in keeping with its own functioning, as the kelp of the shallows gathers up iodine from its ocean habitat. As we ascend in the order of life we find a growing freedom or contingency in the power of the parts of the organism to assume the work of injured parts, in pursuit of the good of the whole.

The Universe an Organic Continuum

The characteristic of a continuum, as Anaxagoras once pointed out, is that it cannot be cut up into unrelated parts or discontinuities. The materialistic assumption has misled us into thinking that the way to complete knowledge is by a more and more copious dissection of a reality that is in essence a continuum Atoms have given way to corpuscles, particles to electrons, protons, neutrons, negatrons, and an array of "rays" ever more complicated, in an effort to chase down reality to its substantial lair. Now what seemed so substantial as functioning continuum threatens to vanish into thin air. There is a truth of discontinuity, of course, but it can never present either the whole truth or the most important truth. Things are what they are because of their relations to the whole. This is the fact that is emphasized in the scientific description of reality as an event in a space-time continuum. The reason this description now strikes us as a novelty is because we have been treating the various parts of a relational world as if their chief importance lay in an existence independent of relationship. The most important reality in respect to any existence or event is its relationship to the rest of reality and this must include also the being of God. No fact can abide by itself alone. To assume that we can know anything without knowing its relations is to abrogate knowledge and make explanation impossible. The universe must be seen from the very beginning as one indivisible whole, a seamless fabric in which every part owes its existence and reality to every other part. A change in one portion

implies a change in the whole garment of reality. This truth finds illustration in the case of the living cell which propagates by division. The original cell divided itself into two, and these into four, so that had none perished by disease or accident, all must have ceased together for lack of sustenance. But that original life of the first cell survives in all living cells, in an immortality of life. As cellular life, it is indeed able to reverse the processes of entropy, the running down of energy, and by reason of its power over the atomic world, to increase the store of experienceable force. But with all its contingency, the cell is held in close limitations. It can exist and grow only by the most exacting cooperation with the remainder of the universe. It can preserve its own identity for its fleeting moment of activity through realizing its relationship and responsibility to the rest of the cosmic process. Thus the tiniest atom and cell have their part to play in cosmic history, are related to all that has gone before and to all that is yet to come.

The notion of a divided time and a divided world has been calamitous in human history, and more than calamitous in the field of religion. Provincialism, parochialism, nationalism, so direct in their appeal to selfishness, have shut our eyes to the dangers of a divided world. Neither province, parish, nor nation; neighborhood, family, nor individual, can live profitably in exclusion from the rest of the world. Narrow profit shuts out the larger good not only for general prosperity but for the individual as well. In other words, we can have no profit without sharing. Our highest good is to be found in the general good.

In the field of religion our parochialisms have set us quarreling over statements of opinion rather than over facts, over forms of worship, rather than questions of righteousness. In these deeper matters we are essentially agreed, yet because of incidental beliefs we refuse to recognize each other's goodness. The fact most often overlooked is that, to God, every human being must be inexpressibly dear. Every effort of the most forlorn or debased, to find the way to a better life, and a living communion with God must be viewed by the Father of all with a divine outpouring of solicitude and love. Yet we criticize such attempts because they do not accord with our own, and look at efforts after God, outside our own communion or religion as demonic in character. In a universe which is itself an organic continuum, there is room for every diversity, because each is in its own way the expression of the common life and spirit. The Great Unity is to be found not in slavish likenesses, but in a common desire to know and to do the will of God. Unity of purpose and of

love is possible with diversity of points of view. "Wide is the world but love more wide," and it can break down all barriers of race, nationality, or religion.

The Supreme Continuum

In spite of all our endeavors to distinguish ourselves from all others by a sort of isolationism, this is not our strongest impulse. Every person hits upon moments in which he recoils in horror from the thought of being left entirely alone. Not only is this terror the bugbear of our childhood, it is the unbearable thought of old age. Our hope and prayer are for something abiding, to which we may cling in faith, as a refuge from the kaleidoscopic shifting of human fortunes. While the materialist seeks this permanence and security in a world of matter, with a desperate struggle thus to satisfy his deepest longings, the spiritualist seeks permanence and security in the spiritual reality of a Supreme Continuum. If our previous considerations are true, the psychic and spiritual consciousness which has entered into the evolutionary process is the source of all created existence. While the materialist contents himself with the merely objective and physical, the spiritualist lays hold of the very springs of life. As sentient life rises in the scale of being above atomic life, so the spiritual self-realization of persons is participation in the Supreme Reality. As the lower order of being must follow the lines laid down for it, and the animal world enjoys a greater but restricted freedom, so in the scale of man's life we arrive at a new landing place, the realm of moral freedom. True indeed, man must on the physical side pay respect to his atomic self, and in the sentient realm be influenced by animal impulses, but on the level of his moral and spiritual selfhood he may attain a growing freedom. Through his reflective powers and his devotion to the highest he may become, with God, a co-creator of a spiritual universe, thus realizing his own identity with the Supreme Continuum on the highest plane of his activity. This capacity for unity with the Divine purpose is the highest privilege, and forms the supreme possibility of the person. Putting one's self into harmony with the will of God is nothing less than putting one's self into harmony with the whole universe, physical and spiritual. For the individual it means that he takes hold upon the deeper resources of life, has the universe behind his efforts, and becomes in the truest and largest sense the vehicle of divine inspiration. If this seems to some too anthropomorphic, as bringing God down to man's aspirations, we must remember that it is the sole condition on which God and man can

meet. The relation between God and man is necessarily expressed in terms of human value. If the relation cannot be thus expressed, no relation between God and man can be established. The charge of anthropomorphism carries no serious weight. The heart of theism lies in the assertion of the existence in God of moral and spiritual qualities, and these are meaningless apart from a free personality making moral choices. Nor does this fact justify the ungrounded assumption of the opponents of theism, that man makes his God out of his own recognized qualities, creating Him in his own image. Man builds his conception of God at the behest of ideals and dreams which he finds dimly foreshadowed in himself, but this idealism and this dreaming would be impossible to any creature which did not draw its sources from the Divine. It is the Spirit of God which moves upon the face of the waters of man's tempestuous moral sea. In this way, every effort after the understanding of God, and of obedience to His will, may be seen as an attempt to embody an expression of the Divine Spirit. The universality of the quest, and its Supreme Source should form a rallying point for sympathetic understanding among men of various religions. We should begin to pay less heed to differences of theological opinion, which is after all an attempt to give a philosophical explanation for experiences that are intuitional, and we should center our emphasis on the "fruits of the spirit," love, joy, peace, truth, and righteousness. It is a divinely inspired unrest which leads man to set forth a conception of God, but it is a conception which springs out of the whole of life's needs, values, relations, and possibilities. Such thoughts would not arise but by the inspiration of the Divine. Not only would a God devoid of human relations be meaningless and impotent, but we must find him related to the world through the possession of those qualities which are characteristic of life and personality. This fact finds expression in the Hebrew term "the living God." Jesus carried the concept a step farther in the phrase "the God of the living," implying a closeness of contact and relation with all living beings, and bringing the conclusion of immortality, at least for all such as find themselves living in God. On examination it will clearly appear that the only God adequate for a changing, living world must be a living God. Furthermore, continuity of creative and moral purpose implies that God could not be of the pantheistic order, a dissolving, resolving, panorama of existence, but a center of personal and enduring self-identity in whom are focused both immanence and transcendence. If a living God is the only adequate concept for a living world, we must apply to it the import of life. To live means

constantly and continuously to improvise, to readapt to ever-changing conditions in a world of freedom, to create continuously. In a world of growing moral ideals, the concept of a living God implies that he is continually adapting himself to the needs, achievements, and understandings of men, working in cooperation with them toward a moral and spiritual goal for the world, but with a pace necessarily slowed up by man's wilfulness and sin. The victory of moral achievement through the cooperative willing of men must be held a joyous part of the Divine experience if God is to be thought of as having sympathetic relation with humanity. Man may thus become a partaker in the divine joy. Human life, and all life, become a portion of the divine consciousness. There is literal truth in the expression: "Not a sparrow shall fall to the ground without your Father"; and in that of the divinely inspired Greek bard who sang: "In Him we live and move and have our being." Such truths apply to a living God but could not be said of a God forever static, completed, unmoved, and immutable.

Is such a conception of God incompatible with that absoluteness of power and perfection which we demand of the Supreme Being? Does the readaptation of the Divine to the moral exigencies of men in the cooperative moral struggle not imply a limited, and therefore an imperfect God? The question immediately loses its force when we reflect that if there is limitation it is self-limitation. Self-limitation is the principal characteristic of the highest power and perfection. The strongest ruler is not he who rules by violence and fear, but he who rules by conviction and example, in the government of free men. The despot is not the real sovereign, but he who through righteous judgments attracts men's voluntary obedience. If we balk at the thought of God's accommodating himself to man's needs, we cannot consistently hold to the incarnation of God in Christ, for the Incarnation means just that. If the cooperation of God in the moral effort of man is a voluntary self-limitation in the interest of a worthy purpose to lead man to his own love of righteousness, such self-humiliation as may be required, becomes the high mark and glory of the divine character. As John Donne once wrote of God: "Thou hast contracted thine immensity, and shut Thyself within Syllables, and accepted a Name from us." Perfect freedom is achieved only when it is infilled and dominated by self-restraint, and the supreme lesson of the life of Jesus seems to be that rigorous self-restraint in the interest of spiritual and moral achievement is not foreign to, or unworthy of, the character of God. The end in view; the spiritual regeneration of the world, is possible only

through the voluntary choice of the good by free moral beings. To achieve that most delicate of tasks without compulsion would be the most perfect of ideals. Self-limitation for the sake of a greater end in view spells moral character in man or God. Such self-limitation in pursuit of moral purposes, while it implies changing content in the divine experience, because of man's freedom, does not necessitate imperfection in the divine character, only incompleteness of experience. A mother's love might be conceived as perfect at every stage of her child's growth, but her experience of motherhood is being completed more and more with each day, taking on a continually changing content. Of inexpressible moment to her are the child's responses to her love and guidance, and the content of her love-experience grows with the intellectual and moral achievement of the child. Such a life history is essential to any experience of a continuum, and is what is meant by life. In life, while it is a sign of incompletness, growth is not a sign of imperfection, nor of weakness, but of increasing power. Growth is valuable and desirable to a morally incompleted world, and perhaps also to a living God, if the moral perfecting of the creatures of his love is of any moment to the divine experience.

Having said this much we must always remember that we can conceive God only through the medium of our human limitations, and we must not impose our temporal and spatial restrictions on a being capable of transcending them in the highest degree. The concept of God as living, however, is of supreme importance to the spiritual progress of humanity. The fact of freedom, the reality of moral volition, carries with it the corollary of a living participating God. If there is a living God who is a participator in our moral struggles, the content of whose living experience is contributed to by the faithfulness and love of his children, we are ushered into a world of spiritual realities. As moral character is ever a matter of free choice, and can never be a matter of compulsion, so it appears that the spiritual regeneration of the world waits upon the cooperative efforts of God and man. A new meaning is given to the conception of ourselves as co-workers together with God. We are placed in an incompleted world which is not so much a creation as something in process of creation. Only so much has yet been created as is necessary to provide the field and ground for moral achievement. Man himself is not yet made but is in the making. The Earth has scarcely yet begun to yield the powers still latent within it, waiting until man shall have achieved a self-mastery which will make him a safe custodian of power. God cannot himself alone build the world of his

contemplation, because to build it without the cooperation of free moral beings would be to miss altogether the purpose of creation The world He contemplates is to be a man-God world of persons, and man must join him in the building of it. If man fails, God fails, and he has placed his faith in us in vain. The willing toil and sacrifice of men, the spiritual achievement won by sweat and blood, these form the imperishable foundations of "The City of God." Founded on the prophets and martyrs, the kings of the earth bring their glory and honor into it. Man proves his divine sonship at last by loving and working in unison with God.

Such a God cannot be conceived in the terms of the ancient and modern deists, as static, absolute, or absentee. He must be seen as maintaining and upholding, continuously creating, the order of relations which constitutes the cosmos. Matter is not independent of Him, natural law is but the uniformity of his free activity, life is a manifestation of his purposive presence, upon him all is momentarily dependent for its existence. The fact is that he did not more create the world in past time than that he *is* now creating it under the temporal and spatial form. Space is the established relation between things made necessary for the development of personality, and time is the condition of moral development. He lives and his life is manifested in ceaseless creative activity, and this immanent and transcendent God survives the welter of time and change through the possession of an enduring self-consciousness and self-direction. Either God is a Person, a Supreme Continuum, or that lonely and solitary pilgrim of the spirit, man, alone of all created things possessing the consciousness of freedom and moral responsibility, but with his sense of failure mingled with undying hope, is the greatest God there is. But in such case there is no meaning, no explanation of cosmic existence. To accept himself as the highest God is against the very nature of man.

Man's Place in the Supreme Continuum

It is evident that in creative power, ability to act in intelligent and voluntary cooperation with the Supreme Continuum, man occupies an exalted and unique place in the universe. In his search after the Divine Will he finds an integration of his own higher powers, a new unity with all like-minded men which provides the strongest impetus for communal action, and an integration with the physical world which is of the highest importance. So long as he seeks principally selfish preferment and personal privilege, he is impotent. The moment he emerges into the larger area of un-

selfish devotion, he has immediately at his back the powers of the universe itself. In the conscious service of God comes that detachment which is perfect freedom. Having no "ax to grind," no fear or threat can move him from the path of duty. He discovers himself in the divine order, related to the Supreme Continuum, and knows that his work cannot ultimately fail. Since his insight is not warped by the lust of personal advantage, he feels himself a part of that ongoing force which cannot suffer permanent defeat until the object of evolution is achieved. The consciousness of unity with the Divine Will enables "one to chase a thousand, and two to put ten thousand to flight." Such power lies in the assurance of a righteous cause.

The consciousness of continuity with the Supreme Power within and behind the universe is the great need of our day. Society suffers from individualism, an isolationism which cuts itself off from the general progress in the selfish search for personal advantage at the expense of others. The demand of the times is for the reintegration of these separated egos into a renewed consciousness of their continuity with the life-process. Our task is to make men appreciative of their relation to the eternal order which is here and now, which cannot be separated either from the future or the past. Eternity is not of tomorrow more than it is of today. What we achieve of spiritual values here and now is the essence of our spiritual existence forever, the foundation upon which alone can be erected the realities of the future life. In the Supreme Continuum alone can we realize our brotherhood with all mankind, the communion of the saints. A realization of the place that each man is privileged to take in the range of cosmic life raises man to a position of new grandeur and importance. No more, with any consistency, shall we be able to speak of him as the least of created things, in a mock humility, losing him in infinite spaces filled with cosmic dust nor raise the issue of racial superiority. As a reflective person, endowed with creative powers, man himself becomes the *raison d'être* of being, to the exact degree in which he realizes himself in the Supreme Continuum.

Faith and Demonstration

The great human values are demonstrable through faith and experience. To one who has not experienced them, who has not committed his life to them, there cannot be understanding or belief. Such is the futility of attempting to tell the thief that some men are honest, the grafter that some men do not have their price, the

traitor that some men will give their lives for their country, the evil-minded that some people act from pure motives, the unloving that there is such an actuality as sacrificial love. Yet these are the realities by which and for which men live and die, and which constitute life's highest rewards. They make human history, they build kingdoms and destroy empires, they put to flight the armies of aliens, quench the violence of fire, turn the edge of the sword. They form the heart of philosophy, inspire science, and without them life would be altogether useless, explanation and knowledge valueless. Yet with their supreme importance to life, these realities are scientifically undemonstrable. They are known and comprehended in living experience, through faith. To those who experience them, scientific demonstration is unnecessary. If such is the case with the lesser values of life, it is not surprising if the supreme value of all, God, as a part of the human consciousness and experience, should fall within the same category. The existence of God is forever undemonstrable scientifically, because he abides within the field of faith and of values, and by reason thereof partakes of supreme reality. We should not demand that science demonstrate His existence, nor should science dream that He does not exist because not susceptible to spatial or temporal measurement. The love of one little child is more of a reality to him who is loved than the thunder of seas or the mass of the mountains. And it can be destroyed by the absence or want of faith. So long as we experience the love of the child, we do not care who insists that it is naught because it cannot be weighed, or cast into a retort. I am moved to nothing but scorn or pity for the man who insists it is nothing more than a "chemism of the brain." Concerning the existence of God, the best science can do is to make no negative assertion, though the universe is vocal with the marvels of infinite purpose. The best philosophy can do is to show the reasonableness for the assumption of the existence of God. The logical demand for God is very great, since an intelligible world calls for an intelligent First and Continuing Cause, and no philosophy which has not assumed it has been able to withstand the criticism of time and man's needs. All that theology can do is to systematize the logic of belief, which has grown out of man's religious consciousness. The only convincing demonstration of God lies in personal experience, and like love is based on faith. The skeptic may gather credit to himself for his unbelief, but rightly understood his skepticism proclaims a poverty of soul, a disbelief in the existence of those values which are worth while. Such a confession should be cause for deepest shame, confession of a sort of

color-blindness to the things of greatest moment. Yet how often do the ignorant boast a preference for the boiler shop over the symphony, or love to declare, "It's all Greek to me," as if ignorance were a distinction. Because the reality of God is demonstrable in personal experience as the source of power, inspiration, and moral strength, it forms a value whose reality is justified in practical issues.

It would not be appropriate to stop at this point without the barest hint at the deeper facts: the relation of faith to the higher values. In these, faith is a profounder asset than knowledge, paradoxical as that may seem. It is faith that creates values, makes them an actuality in human life. Without faith they perish. Love, for instance, cannot last long in an atmosphere of unbelief. If I cannot believe in the reality or sincerity of my friend's love, I cannot enjoy it as an active asset of life. Were I to insist upon scientific demonstration of its existence before accepting it, I would certainly lose it. The other values grow likewise on the tree of faith. If religion, God, punishment, Heaven, immortality, were scientifically demonstrable, religion would be turned into the bargain counter some religionists conceive it to be, with pains and pleasures balanced, but religion would be dead. We must cling to righteousness against all appearances, and when it promises loss, if we are to be truly religious. We must be righteous for righteousness' sake and not to avoid punishment. Religion reaches its highest surety as faith upholds men in the deepest experiences, enabling them to face tragedy like gods. Make religion independent of faith and its entire character is destroyed

"And why," some may ask, "is faith so inextricably bound up with values?" The answer is simple. Faith, we have said, is more important than knowledge, for knowledge with all its pricelessness is of things that are seen. Faith takes hold upon things that as yet are not seen and creates them into reality. Faith is creative. Knowledge is often credited with the values faith achieves, but knowledge without faith is stagnant and helpless. Faith brings insight where knowledge with sight alone has failed, and insight is necessary to progress. So, while knowledge in smug self-complacency accepts what it calls the inevitable, faith demands the "impossible" and cries: "It shall be done!" The advance of society depends upon faith, and through faith alone may we link ourselves up with the deepest processes of life, visible in the evolutionary order, and expressed in and through cooperation with the Supreme Continuum

CHAPTER XXXIV

"Two Sparrows for a Farthing"

WHO does not recall that hopeful and delectable moment when first his childish fingers grasped the copper coin, lowest denominator of capitalism, which would buy "two for a cent"? No decision which we have made since has seemed more momentous than that one when we faced the impatient mountain of a man behind the counter. Perhaps there was something Godlike in our consciousness of the importance of the trivial, something that had been lost from the vision of the burly figure that could dole out two lemon drops for a cent. In somewhat similar figure, Jesus drew a picture of the greatness of God which reverses our common standards, for its prime characteristic is care for the apparently inconsequential. The coin mentioned as buying two sparrows was the smallest copper available and, in common estimation, sufficiently expressed the value of two of God's tiny creatures. Nor was this a fiat valuation, resting in sentiment alone. What the human appraisers could so easily overlook, was the relation of the sparrows to the whole circuit and realm of nature, their necessity to the public health, and more than that, their task of keeping down the enemies of vegetation. Their value to society was really incalculable, and so it seemed to God, not only for man's sake but also for the sake of the Divine cosmic purposes. Not one should fall to the ground without the concern of the Father. We are here faced with a new concept of greatness, in striking contrast with those ordinarily held. It is at antithesis with the common notion. It is at striking variance with the picture we draw, of man as an insignificant figure in the spatial vastness and numerical multiplicity of worlds. It conflicts with prevailing world politics which can coldly assume the "negligibility" of "inferior" peoples, and then proceed to stifle human opinions and human rights under the threat of violence and power. This viewpoint is in opposition to religious concepts representing an Almighty so removed from humanity as to be incapable of bending to the wants of His humblest creatures, and imagining Him as deriving pleasure from the suffering of men of other faiths than our own, as if they too were not His children. In our worldly religious wisdom, we have made a God in our own image, or as we would like Him to be, a totalitarian despot, devouring in his

wrath. The simple picture of God from the lips of the Man of Nazareth contradicts all this. "Two for a cent": and yet not one of these noisy and sometime noisome little creatures whose fall is not attended by the concern of the Infinite Mercy. Thus is our favorite measure of greatness abrogated and all reality set to a different scale. The story about Abraham Lincoln we most love, is not of his use of power which many once said was unscrupulous and tyrannical, but of the martyr President, hand in hand with a little child of the street, shortening his long step to that of the infant, as they wandered from store window to store window. In that accommodation to the steps of the child we see the manifestation of greatness, and in this picture of God we see the Almighty cutting his paces to the needs of a wounded sparrow, the true transvaluation of values.

The Greatness of God

There is a beautiful passage in the Book of Job[1] in which the greatness of God is pictured in similar terms, as the Eternal Spirit moving in the whole of creation, giving the times and the seasons to animated life, Father of the rain, Begetter of the dew, satisfying with moisture the waste and solitary ground, hiding wisdom and understanding in the inner parts, providing the ravens with food, and the young ravens when they cry unto God for meat, giving wings to the peacock and feathers to the ostrich, and guiding the trackless flight of the hawk. For the fulfilment of such a measure of greatness only God is sufficient, but the implications for the Divine evaluation of the person is overwhelming. Great is the assurance it gives of the Divine care for man, upon which man can safely trust, even as the rest of creation. The thought suggests the words of Sidney Lanier in the *Hymns of the Marshes*,[2] in which he declares that he will build himself a resting place in the Supreme care, even as the marsh hen builds her nest on the infinite mercies of God.

> As the marsh-hen secretly builds on the watery sod,
> Behold I will build me a nest on the greatness of God:
> I will fly in the greatness of God as the marsh-hen flies
> In the freedom that fills all the space twixt the
> marsh and the skies:
> By so many roots as the marsh-grass sends in the sod
> I will heartily lay me ahold on the greatness of God:
> Oh, like to the greatness of God is the greatness within
> The range of the marshes, the liberal marshes of Glynn.

[1]Chapters 38-41.

[2]*Poems*, Scribners, N. Y., p. 17.

So far has popular thought departed from such an ideal of greatness, that we need to remind ourselves that the standard does not hold for Divinity alone, but is mirrored in all existence. We continually lose sight of what we are pleased to call the inconsequentials. In a reality, the chief significance of which is a continuum, value may be of greater or less degree, but it can never be inconsequential. The scientist pays tribute to this principle when he realizes that he cannot afford to let the apparently least of phenomena escape him. He hunts for the hidden, for that which eludes the careless experimenter. He sees that which may not at all appear to the average onlooker, the possible relation in the succession of phenomena, of the obscure link with all the rest. His patience and insight in unraveling the mysteries of nature, his disclosure of the importance of the seemingly negligible, becomes the measure of his scientific breadth and greatness.

The principle is equally valid in the sphere of society and government. World history has, thus far, been a record of races, nations, cliques, classes, and groups, building themselves in grandiose manner, upon the wants, miseries and injustices inflicted on the multitudes. The grandeur of the few has been mistaken as the measure of civilization, the justification of the sufferings of the nameless majority who have not the power to take care of themselves. Society has been generally organized on the proposition that God is a respecter of persons, ready to deal out one sort of justice to some, and to weight the balances of others. Power is assumed to be the justification of oppression. The possession of the machine gun was blasphemously assumed to betoken a Divine mandate to conquer the naked Ethiopian spearmen, to reduce them to slavery, and to destroy their religious independence. But this last naked spearman was a man, bearing potentialities of moment to civilization, with arts and crafts and strength and points of view needed for the diversities of human existence. Any treatment of him that was wanting in respect for his personality, or that invaded the integrity of his soul, was a descent to a savagery more dire than his own. History may have to accord a new definition to the term "civilized." No civilized society can be based on less a principle than the respect for the personal integrity of the least of its members. Throughout the universe is written in letters of fire for every discerning mind to read, a fact that can no more be abrogated than scientific law: "whoever seizes the power who can" grasps also an inherent weakness which will ultimately destroy that power. We should make up our minds that in the new world we hope to build, there can safely

remain no suppressed peoples or persons save those bent on wickedness who must be restrained as enemies of the common welfare. None can be ruled out of the common care, by reason of ignorance, poverty or physical condition, but only by the will to evil. The measure of social and political efficiency lies in the capacity to leave no person out of account. Anything other than a real democracy will therefore be subject to unrest, revolt, and eventual overthrow. This is the reason why democracy (not its form) must become the eventual governmental and societal status of man.

Our principle of greatness is no less applicable to religion, but rather more. Religion is less than nothing if it does not build up the ethical personalities of its devotees. Its great task is to promote the integrity and self-respect of the person, enabling him to find his true moral and spiritual relationship with the world order, with society, with man and with God. Not only can religion not overlook any person without denying the principle of the Fatherhood of God, but it cannot refuse to acknowledge and applaud goodness and Godlike action wherever it appears, whether in men of other sects, other religions, or of no confession at all. Plain ethical righteousness and brotherly love must be recognized as the heart of true religion. Unless we come to such assent, we deny the spirit of God which seeks avenues of expression through the activities of men everywhere. No act of love or unselfish sacrifice for righteousness, justice, truth or humanity, will ever come to birth in the world, except by the inspiration of God. The sooner sectarians can arrive at this basis of tolerance and clear thinking, the better for the world. The God who marks the fall of the sparrow, and feels therein some loss to the Divine experience, will most surely gather into his treasury every fragment of unselfish love and goodness as a pearl of great price. While all this may seem a transvaluation of our usual values as we have seen them, there is an eternal justice about such a reversal of common opinion that cannot be gainsaid.

The Peril of Neglected Details

Power, won at great cost by scientific attention to the most minute details, threatens to make us indifferent to minutiae in other fields. We are now intoxicated with power, and in our elation are inclined to overlook facts and values that do not pertain to physical power. As the scientist cannot succeed by ignoring the least phenomenon of his experiment, so in the processes of society we must learn the necessity of looking after the little and forgotten influences that make for peace and well being. Power tempts us to

an easy arrogance, self-assertion, pride, while it minimizes the weak as negligible. Too often, in the treatment of other peoples, the power to exploit for personal or national benefit is assumed to be the charter for such exploitation. Contentment through ignorance is assumed to be a valid reason for not disturbing the ignorance. The tragedy in such a view lies in the interrelatedness of all life, society, and government. Does some child suffer somewhere in poverty, neglect, and ignorance? Then my child and those who come after me are imperiled. It is the dead weight of the unconsidered multitudes, as well as the wickedness of the violent, and the comfortable selfishness of the privileged, that undermines the foundations of the social order. One can scarcely say which of these is most responsible for the lag in social progress. This drag can be cured only by new attention to details, such as the scientist puts into his research, and the chief of details in human society is the person.

The Tragic Residue

We must not shut our eyes to the tragic residue in the lesson of the sparrows. Especially fatal to our argument would such an oversight be, in days when hearts still ache with loss and the world looks with horror into the abyss of wickedness, calamity and evil in which all the bestiality of all the inhuman depravities seem to have been concentrated in our own time. There comes the feeling that God should have stopped it if he had the power and if he was powerless, to deny his existence altogether. If there is a God no doubt he would have stopped it if it had been possible without the destruction of human freedom. Reflection upon the character of God and the present state of the world should give us a new understanding of the estimate that God places upon freedom. The crisis should give reassurance to those who feel that since man had the power to stop it, or at least to justify his soul by opposing it, he could find salvation only in the resistance of evil. Putting the problem up to the unassisted efforts of God is a confession of moral incapacity, and comes near to being acquiescence in wickedness. The unprotesting bystander even becomes an accessory in crime. The words of the Cambridge Memorial carry an eternal insight:

> 'Tis man's perdition to be safe,
> When for the truth he ought to die.

Here we arrive at the heart of tragedy; man's physical frailty contrasted with his moral possibilities; his imprisonment by physical forces that have no power over his soul; his defiance of

death rather than to surrender his righteous principles. The besetting sin of our age is perhaps the small esteem in which we hold principles. In the last analysis the problem is not to be solved in the mass. Each person, and here we hit again on our radial truth, must solve it within himself, and solving it, become a benefactor of all, a link in the great chain of being. Can God be with man in his hour of resistance to unrighteousness, and with carnage on his hands? Yes! But without hatred in his heart as he gives all for the good of all. He may thus realize his own soul as he gives all for that which, according to his best lights, is the good of all. He may thus take at a bound the spiritual achievement that others labor at all their lives and fail to find. Returning again to Lanier at the passage previously quoted, he may realize himself as

> The catholic man who hath mightily won
> God out of knowledge, and good out of infinite pain
> And sight out of blindness, and purity out of stain.

Does this seem out of keeping with the character of God? The only answer is the answer of the Cross, on which God himself is seen to suffer that all may eventually be free. The alternative of tragedy lies between those who, for fear of death, live all their lives in bondage, and those who die in order to live. This is tragedy, paradox, and salvation all in one, but no other salvation for man can be conceived.

CHAPTER XXXV

Your Frame of Reference

OUR WORLD will be as large or as small as we choose to make it. The child in a weed patch levels great forests, constructs roads and bridges, castles and fortresses, homes, schools and churches, living for some moments of delight in a miniature world which his imagination has created. Having reduced his frame of reference to the length of a beanstalk everything else falls into appropriate dimension. We seldom reflect upon the fact of how much of this childish imagination is carried on into adult life, to create the world in which we live. Our living world may extend into all lands, all literatures, and all peoples, and our feeling may parallel that of Democritus who declared: "All the world is my fatherland." We may, on the other hand, limit our living world to our race, our nation, our state, our county, our club, our church, our school, our office, our circle of friends, our three per cent, our kitchen, our arthritis, or our operation. It is amazing what superstructures of life men can build on scanty foundations. However, the frame of reference we choose will become the measure of our world of experience, and eventually of ourselves. It will come to dominate our understanding, to provide the basis of our interpretations of what we experience, and will determine our social outlook. Furthermore, it will ordain what shall be the meaning and outcome of life for us. We shall become it, and it will become us. We shall never be greater than nor different from, our frame of reference. The present world is infected with, cabined, cramped, and confined by the prevalence of narrow frames of reference in social, educational, and political environment, in a physical world which has suddenly grown to universal dimensionality. Even so humdrum an occupation as business cannot be conducted with the nose securely in the ledger, and with no outlook on a world as wide as the earth. The frame and status of the corner grocery is no longer adequate even for the business of the corner grocer. The products of the world crowd at his doors in easy exchange from strange and distant peoples, and he is not permitted to settle back merely to the satisfaction of old wants. Neither shall we, in such a world, be able easily to keep our old frames of reference in education, in social intercourse, in politi-

cal theory, or in religion. Deplore it how we may, we cannot set back the course of history, though it is quite possible to head it straight toward disaster. We must either break bounds into a larger and better world, or we shall drop back to new superstitions, up-to-date totemisms, and educated savageries.

Our Frame of Reference and Tomorrow

The greatest need for the present cramped world is the advent of a spirit and mood of universality. There is little use to cry for *lebensraum*, for the boundaries of the physical are strictly limited. The expansion of *lebensraum* must take place within the soul and heart of man himself, and it can be achieved only by acceptance of a universal frame of reference which looks upon "foreigners," barbarians, and savages from new angles of interest and sympathy. We cannot move over the boundaries of our world, but we must move over the frontiers of our hearts or there can be no peace. We are now engaged in learning this lesson in the hard way. The terrifying sound of the trumpets of war sent the younger generation around the world to mingle in a world-wide association. War summoned them into distant miasmatic swamp and jungle, into dangers of every conceivable kind and with horrors that wrecked the minds of the less stalwart. The moral and spiritual values of our civilization were put to tests hitherto unknown. Our men discovered in uncouth and apparently savage people loyalties of heart and kindliness of disposition that they had supposed were the sole accompaniment of American clothes and haircuts. The term "Christian" was also given a new meaning in their contacts with the so-called "fuzzy-wuzzies," and the self-sacrifice of the missionary called for a worthier appraisal than it has customarily received at the hands of comfort-seeking tourists or "civilized" exploiters. Under the terrible hand of the war-god the earth was shaken out of its old complacencies, its provincialisms, its intolerable snobberies, and through terrible disciplines men have been awakened to new and universal understandings. At a time when some of us seek to slink back into the old isolationisms, it is unthinkable that these young and impressionable boys from our farms, factories, and schools should return to us without changed outlooks upon the world, and without wider views than were possible to their fathers. If, indeed, we have learned nothing from the recent past, let us know that the shaking of the earth will go on until we arrive at universal understandings that will be just to all, and that will recognize in every man an intrinsic worth and an honorable place in the general order.

One important question now seems to be, how men who have been trained to see everything from the parochial standpoint; who have boasted of exclusiveness; who continue to think in terms of empire and sovereignty; who consider the profits of exploitation more important than justice; how can such men be brought to the larger frame of reference which must gather within its purview a whole world of persons, the "fuzzy-wuzzies" with the rest? The world of tomorrow cannot subsist on rights filched from the multitudes, multitudes unable to speak for themselves. All things must be made new. The process of social and political change has now reached the point that the chick cannot be thrust back into the shell. We weep to see the old world go, but we have no power to stay its flight. The old world has already passed away with noise and heat, and it is ours to make a new world. What that world shall be will depend upon the greatness, the catholicity of our frame of reference.

Religion and the Universal Frame of Reference

A speaker at a recent religious conference[1] referred to the universal outlook achieved by science, and by contemporary law. We seem to be discovering after years of extraterritorial jurisdiction in China, that the principles of justice are the same among all normal men. Scientific discoveries and advances made in one nation cannot be withheld from others. There is not a peculiarly German, French, British, Russian, or American science, restricted and applicable only within territorial bounds. Inventions made in one part of the world are quickly adopted by all. We shall vainly hope to keep from any enemy our most cherished scientific secret. The future progress of science in the interest of world-betterment depends upon a world at peace and a world of intellectual freedom. Powerful as are these pathways to universal understanding, they cannot be as important in their bearing upon the future society as that universalism which is due to come through religion. The prospect of universal religious understanding may now seem far away and impossible, but it may be nearer at hand than we now can dream.[2] There was a time between the eighth and the fifth centuries B.C. when the whole civilized world seemed moved by a common impulse to break away from tribal fetishisms and belief in magic which had bound it, and to escape to a universal concept of God. World-wide migrations and movements of peoples brought

[1]Dr. W. E. Hocking at the University of California at Los Angeles.

[2]See Chapter XXVII. "The Quantum View of History," in the author's *The Survival of Western Culture*, Harper, N. Y.

men face to face with the fact that their religious frame of reference had become too small to be adequate or satisfying. We may be once more on the verge of some such widespread impulse toward religion if we can lift our periscopes high enough to see the universal elements present in all religions, and from these as a basis come to the true universal religion. Let us not begin by claiming *ours* to be the universal religion; let time and the fulfilment of human need proclaim that. Though we believe that Christianity is the only truly universal religion, it may be that we have localized what should be a universal religion into something less by the narrowness of our interpretations and our failure to practice its universal concepts. If we go to the world with claims of exclusiveness, we do by that much localize and provincialize our faith. We must realize that God is not alone the God of Abraham and Isaac and Jacob, but of the whole earth, who has been trying since the advent of man to get his message through to stupid and stubborn hearts. Shall we lightly assume then, that but in our single instance, He has altogether failed? In religion we have a common basis of approach to all men of good will: the search for righteousness through unity with the God of all souls. No one of any faith will object to the practice of the Golden Rule, or declare it unorthodox. We know of no religion that denounces love toward our fellowmen. The exceptions to this are all on the part of provincial idolaters, who would restrict the love of God to men of their philosophical or theological opinion, or communion, or race. This view of a special God to look out for certain people at the expense of others, however dignified or modernized, is of a piece with that idolatry which worshiped on every high hill in the interest of good crops and fertile flocks for the worshipers. Love is a universal language, and once our God is released from the limitations of our parochialism, and worshiped as the loving Father of all men, their struggles to know Him, to discover His will, take on an importance which can never be truly estimated by the religious provincial. Because religion concerns itself with those moral and spiritual values that are necessary to the preservation of civilization, or better, perhaps, to the *making* of civilization, there is necessity for emphasizing its universal elements. These are the ones that men everywhere are able to understand, but we have too much insisted on teaching them the provincialisms, the things that are incidental to our customs, like clothing and forms of speech and action. The world has really grown too close together in an association of many peoples, to be able to gather the universe of religious reality into the frame of

reference of a particular theology or philosophy of a restricted place, time, or race. I love my own point of view because by it I have found the way to peace, but I can realize a sympathy with all others who seek the same goal, though it be by a different road.

Some of these universal aspects of religion seem on the point of disappearance from the Western World, such as the sense of sin, the importance and validity of prayer, the need for meditation or practice of "the consciousness of God," without which elements religious feeling can achieve no depth, nor enter into creative relation with the world of life and inspiration If we feel inclined to chide the Eastern religions with having forgotten the worth and meaning of the self or person, we may not be so certain that we have not bargained off our personalities for a cheap, selfish, self-assertive individualism. Where now in the Western World's religion do we find that emphasis upon physical, mental, and moral discipline so necessary to the considered life? For a universal faith there must also come a new recognition of God as a part of the historic process, a God who has not only incarnated himself in the Christ, but who in some degree incarnates himself in every human heart that seeks him. Such, it would seem, are some of the principles involved in that universal frame of reference demanded by the religious crisis of our time.

Finding Our Frame of Reference

How is the individual to find a frame of reference so sufficiently universal as to lift him into new worlds of activity, thought, and power? Certainly it cannot be through the narrow hope of being sufficiently righteous, no more, to escape hell-fire. No hope could be more preposterous, than that we can cling mostly to the world of sense, sin, and selfishness and yet escape a well-deserved retribution. Such a frame of reference differs in no essential respect from that of the man who balances the gains of pleasure against the inconveniences of righteousness. Such a concept is so narrowing as to turn us back from any world of genuine values. Neither can we come to that larger world through mere devices of asceticism, form, or creed. The tithing of mint, anise, and cumin with the idea that such meets the requirements of religion, can only be stifling and belittling to the generous impulses demanded of a universal religion. There is nothing in these attitudes that can enable us in passive equanimity and peace of soul to meet the adversities of time and fate, to say nothing of a positive and creative expression of religious life. Upon what, then, can we settle as an adequate

frame of reference for the human life of our day? It can be nothing less than a complete and unquestioning surrender to the will of God as we are able to understand it, and there are ways of growing illumination open to every seeking soul. This means that we will not impose, in the way of the good life, selfish and petty aims, personal comforts, vanities, or weaknesses that would dull in us the highest and truest expression of the Divine Spirit. This does not mean that we shall become the prey of idiosyncrasies and fanaticisms, led by the temptation to make a show of piety in matters easily seen of men, and pleasant to the ego. Past all these we must go to the steady, persistent pursuit of some worthy goal (not of our own salvation), for our redemption will lie in forgetting about our own salvation in a self-forgetting service of others. If we seek to save even a religious life we shall lose it. It is only as we are willing to be spent, and to give ourselves for others, that our personalities shall be kept unto life eternal. All this is as far from professional or formal religion as the heavens are high above the earth. Our frame of reference can center in no less a place than God, looking at life as the ancient theologians expressed it, *sub specie aeternitatis* —under the light of eternity. Only so wide a frame of reference can lift us above the petty passions and desires of the world of sense.

"Au Large!"

Here, then, is the point at which we may hook up with the living forces that are creating the universe, making the new world which is yet to be. Here is a task which calls for all the power that any man can put into it. The French *Voyageur* used to set off into the unexplored spaces of the wilderness, thrusting his little canoe into the torrent of waters with the cry: "*Au large!*" "into the wide open spaces!" We are not lacking such courage now, as we have seen in recent years our pilots pushing off into uncharted air, even with no prospect of return. Perhaps nothing but the moral and spiritual upset of the world which we are experiencing could induce men to parallel this courage with spiritual adventure. It has been a long time since, in religion, men have in any large scale dared to live dangerously. Surely it is unthinkable that out of all those who have made such perilous adventure in the skies there should be none for the supreme spiritual hazard. It is only in some such all-out way that the Supreme Continuum has a chance to work His will to the fullest in and through us, to bring the goal of evolution, a world of righteousness. Only by some such surrender of ourselves can we have behind us the power of the universe, because we ask nothing

for ourselves but all for the Kingdom of God on earth. In such a way can we unite ourselves with the psychic element in the evolutionary process, which, beyond matter or chemical combination has, step by step, wrought the miracle of sentient life, of species, of reflective mind and soul, of the human capacity for God, of the God-man. Given such devotion, there is no world that ought to come, but that may come. Not with the tumult and shouting of captains and kings, but after the manner of the silent processes of nature working in the darkness as surely as in the light, and unobserved: "First the blade, then the corn, then the full corn in the ear." "For, Lo! the Kingdom of God is within you."

CHAPTER XXXVI

Beyond Time

OUR THOUGHT has already been directed to the phenomena connected with the living cell, in which may be seen the achievement of a sort of immortality, the survival of the living over time. But the survival of the simple cell is an impersonal affair. There is a sense in which that first amoeba may be said to form a part and parcel of the latest descendant, but reflection upon the facts will tell us of the carrying along of tendencies, purposes, and meanings that cannot be identified with the substance of the cell itself. If there is immortality here, it is an immortality of meaning, or purpose, or spirit, rather than a survival of physical substance, which in the process of growth is being constantly dissipated and renewed. It is not the substance of the cell, but rather the imponderables connected with the cell that survive, a consideration with meaning deep for the immortality of the soul of man. As we advance in the progress of evolution, it is the intangible purposes and meaning, or the psychic qualities of life that take on increasing emphasis and importance. Nature is "reeking in tooth and claw," and apart from a discernible meaning and prophecy approaching moral self-consciousness, must appear cruelly impersonal. Our one prospect of establishing a benevolence in nature is to turn away from her physical to her moral aspects. If her cycles of death, conflict and savagery can be seen as essential to the creation in man, far off, of a consciousness of himself, an awareness of his place and purpose in evolution, the result may have justified the sole means by which there could arise voluntary participation in the evolution of the evolved creatures themselves. The "far-off Divine event" seems to be arrival at the self-conscious life of moral freedom. The single cell gives way to a collection of cells cooperating in an organism to meet increasing purposes. The simpler organism grows to the more complex, until in the mind and emotional nature of man there arrives the possibility of conscious collaboration in the purposes of evolution. The whole process may represent time becoming timeless, as man becomes conscious of this undying and eternal purpose that pervades the universe. As a conscious participant in evolution man occupies a unique position and the opportunity to

create a moral and spiritual world becomes his special privilege and responsibility.

Life the Token of Perpetuity

In the whole realm of mysteries, life is perhaps the least explicable of all. The static world of matter can be easily analyzed and broken up into its constituent elements. The living organism is only partially susceptible to a like analysis. The substantial elements we can get in chemical analysis, but that which differentiates the living cell from matter forever escapes us. There is present an element which is no element, which transcends the elements, and which is able to transform and assimilate them to its own needs and purposes. It is the peculiar irony of our modern outlook, that we have considered this functioning reality which subdues matter as less important than matter, even as negligible in scientific inquiry, because it is beyond matter. Not only so, but the power of life, while subject to change, to conquer and increase the store of the world's energy while using it, to cast itself into the future and insure through other organisms its imponderable conquests, these salient facts are generally neglected. One most important reality is the continued triumph of life over the static world. Everywhere there is conflict, yet everywhere life is triumphant, and more triumphant the closer it approaches to full self-consciousness. Seas cannot overwhelm it nor seasons destroy it. It exhibits a tenacious assimilation, gains hardiness out of peril and disaster, builds recalcitrant matter into something more refined, releasing powers that were only latent, into activities hitherto unexpressible, even nonexistent outside the touch of life, consciousness, and purpose. If the whole world of matter is to be considered a congeries of events, from which our senses draw the interpretation of form and substance, then outside of perceiving minds or Mind, there could be no continuity at all. What there is of perpetuity here is not in the matter, where we persistently look for it, but in these imponderable meanings and qualities that survive the passage of events. As made up of constantly active forces, the whole of reality at one moment gives way to another whole of reality the next moment. To unconscious existence there could be no relationship between succeeding moments, each would be a new creation, a new world. The existence of this fact indicates the reason why modern outstanding physicists are inclined to throw over as untenable all mechanistic claims for causation. Conscious being, in distinction from unconscious, while continually changing, is able to preserve its self-identity as the

subject of swiftly passing experiences which it weaves into the cloth of meaning. The perpetuity which is discoverable in the simplest forms of life is raised to the *n*th power in self-conscious life. As the simple cell, though unconsciously, engraves its character on all the life that follows in descent, so, in the higher forms of living self-consciousness it is only reasonable to expect perpetuity *in its kind*, the imponderables of the spirit, righteousness, love, peace, and the experience of God. To the person, in a new sense, is given the possibility of becoming creative. He can create a moral and spiritual world, and if the preceding analogies can be said to hold throughout the universe, this higher realm should eventually conquer the lower.

Man the New Step in Evolution

In the self-consciousness of man appears a new element in the evolutionary process, not sentiency, to be sure, but something greater than sentiency, moral and creatively purposive self-consciousness. The importance of this new arrival cannot be overestimated, for it is revolutionary in character. In man we have not only self-consciousness, not only consciousness of other selves, as in the animals, but a hitherto lacking expression of reality, power of reflection upon conscious states opening a new world of creative possibilities. A new realm of sympathy and suffering, right and wrong, social duty and moral responsibility swims into ken. With this comes a capacity for purpose which can be dedicated to something higher than physical continuity, to something nobler than conflict, to something but faintly suggested in animal life: struggle for the life and welfare of others. If, up to this point, life was dedicated to strife against the impassive forces of nature, and compelled to wring from its adversities a higher power, so now we find in human existence the possibility of a superior order of being, that of finding its good in the good of others. Up until the coming of man, such participation in the evolutionary purpose *from within*, and self-consciously, had been but partially possible.[1]

If anti-evolutionists have been overdisturbed or unduly elated by the present moratorium in evolution, the incapacity of the evolutionist to produce concrete evidence of actual evolution, it might be well for them to examine the power of evolving new species, which is now being exercised by man himself, and will be more and more. Henceforth it is apparent, if evolutionary progress is to be

[1]See Chapter XXVI, "The Neglected Factor in Progress," in the author's *The Survival of Western Culture*, Harper, N. Y.

made, it is to come through the moral, intellectual, and spiritual cooperation of man. With him is the power and with him is the responsibility. If one is inclined to feel that he can live for himself alone, and that there is no one over him, the consciousness of his place in the complete order and ongoing of life should give him pause. The world of war, suffering, conflict, and disease awaits the redemption which man in cooperation with God can bring, once he assumes his true relation to the Divine. Why does not the All-powerful do it, if He is a moral being and desires it, is a question often put. Because morality cannot be achieved by external circumstance, but only with the cooperation of righteous wills. It would be impossible for God to create a moral world outside himself without the voluntary cooperation of moral beings. When we wish a moral world we shall have one, and one cannot be thrust upon us against our wills. It is in man's power to end war, suffering and wrong, perhaps also disease, as soon as, generally, he wishes righteousness to the extent of being righteous. The blessings for which man prays will come when he chooses to spend on peace and well-being, energies equivalent to those he now wastes in the interests of war, enslavement, and exploitation. A change in the heart of man would instantly usher in a new world. This general condition cannot arrive, however, while we individually shirk responsibility, or refuse in comfortable complacency to act because the task seems great, or because others are not acting. Each of us is the "missing link" in this new order of evolution.

Eternal Life is Eternal Living

One reason for our personal failure to realize the importance of our own part in the general scheme, is our contempt for the present moment and for spiritual reality, in relating ourselves to the vastness of the eternal order. To take one's self seriously at all, seems like an overexpansion of the ego to the person who is comfortably situated, or not in dire suffering. It is as if one link in the chain should begin to contemplate its smallness compared with the extent of the great chain which seems to stretch to infinity and should then proceed to act on the assumption of its own unimportance, in a species of mock humility. The fact would be that the whole chain is dependent on that link. We are having serious difficulty in the present world to shuffle off the chrysalis of selfish animality. The recent terrible war is the price we have had to pay for much make-believe humility and the accompanying complacency with forces of evil, particularly where they affect our personal interests. Do we

say: "All that I ask for is peace"? It may then be asked: "Peace for what?" "Peace for self-enjoyment while the greater part of the world rots in ignorance, disease and slavery?" If so, to peace I have no right. Nor can there be peace in the world on such terms. There never can be permanent peace until there is, first of all, righteousness. Need we be ringed about with the unspeakable horrors of war, taking our bravest and best, in order to understand that we can find our good only in the good of all, and that our decisions and our contribution are of importance to the whole? We place our heavens, our utopias and our hells at an imagined distance when they are in fact here and now. When will eternal life begin? Not in the dim and distant future, but now! We are indissolubly linked with all time, with all humanity, with the eternal processes that rest in the mind of God. We are as truly a part of the Divine plan and purpose as any event could be, and as such, important consequences hinge upon your action and mine.

Why, when we are linked in with the chain of Eternal purpose, should we be content to identify ourselves with an order of life less than eternal, distinctly beneath us, easily limited to the desires of the flesh, the gossip of the neighborhood, the petty outlook of the drawing room, the office, the kitchen, or the shop? If we disclose no eternity in the aspects of the life that now is, how shall we discover an eternal life anywhere, for there is a continuity of time which makes one moment important to all the others.

Another point is impressive also: As it is given us to participate here and now in an eternal order, the eternity of that life in which we partake forms the most reasonable assurance of its future continuity. This world is so full of blasted hopes, of unfulfilled promises, and broken dreams, that the Supreme Life, which can entertain its purposes and see that they survive through millennia of delayed fulfilment, cannot leave His cooperator, man, in the dust, without the betrayal of His own character. Because He lives, because we are the privileged partakers in His eternity, we shall live also. We catch the significance of this fact in our deeper moments, and know it must be true if there is to be any justification for creation. As one friend who has since entered into fulness of knowledge expressed it: "Without immortality, creation is a mess."

The Scope of Life

Most of us are fond of expressing our modesty by referring to ourselves as nonentities, though we are immediately aroused if anyone else expresses the same opinion of us. Our ideal seems to

be that we are set here for the particular intensification of animal enjoyments. Privileged with creative powers, we use them to increase our stock of food, or friends, or publicity, or cash, a thousand things, which, compared with our real mission, are the merest baubles, the tinsel of specious joys and empty satisfactions. In this effort we attempt to jolly ourselves into a good time, and to feed our vanity with achievements that can only create a deeper thirst. The men of anyone's acquaintance these days who have peace of mind and soul can, very likely, be counted on the fingers of a single hand. Yet we have ways and means of physical satisfaction of which our fathers never dreamed. Our disease of discontent cannot be cured so long as we do nothing to realize our place and relationship in the eternal order. Our unhappiness comes from being misfits in a world that looks far off to the creation of a new heaven and a new earth. It is as if a giant were attempting to content himself with the employment of his time and strength with playthings of the nursery. Capacity he has, to create, to fulfil a lot and destiny so superb as to be beyond computation, by reason of the forces—physical, mental, and spiritual—that are his. These could fill up the vacuum of his weakness and transform it into power, but, engrossed in infantile pleasure, our giant spends his energies in playing jackstraws, and is consumed with discontents. One reason most of us are so "absent from the Lord" is because we are so "present in the body," so engrossed in matters of little account. Given the possibilities of souls with power to embrace a universe of time and existence, we are content to spend our days "as a tale of little meaning." Jesus saw how easy it was for men to busy themselves with the affairs of the body, asking, "What shall we eat?" "What shall we drink?" "Wherewithal shall we be clothed?" or "Whom shall we invite?" "Where shall we go?" "Are we in the Blue Book?" None of these things is of prime importance. Yet we, with God-given souls, occupy our time exclusively with these things, being present in the body but absent from the Lord. The only chance of restoring our equanimity, of recovering the lost way of peace, is to put ourselves back into the chain of Divine relationships expressed by Paul as being present with the Lord. The army is by so much ineffective, as one after another of the troops who should be present, has to be written down as "absent or unaccounted for." Yet, as far as the creation of a new world which lies within the range of possibility is concerned, most of us are content to leave it to others. We need to realize our place in the Divine plan, to see that our lives are a part of an intricate pattern of universal life, that ages have been work-

ing toward the end to which we have come, and that failure to stand up and be counted is to delay the result. We have had opportunity during days of war to know the helplessness of the men at the front, if the men and women in the factory at home let down on the supplies. Nor does this mean that we are to crowd to the forward trenches, to make a mock-heroic stand at work which others are better prepared to do. It means, rather, that we are to begin where we are, with the capacities that are ours, to live in these days and ways, after the eternal order. Our part may seem to us small and of little account to the Supreme Continuum, but in his hands the smallest loyalty, fully surrendered, can be made to grow into greatness and power. If one is only an acorn, there need be no worry that one is not a giant oak. All that the acorn needs to do is to fulfil its function and the Divine Architect will do the rest. How can we, in the face of opportunities, of kingdoms, principalities, powers, and worlds to come, fail in our little place? We must not, however small, be absent from our part in the Divine wholeness.

Beyond Time

In the light of such considerations there is little use of inquiring about the prospects of immortality. The more appropriate question might be whether we have anything about our hopes, aspirations, plan of life, which hooks up with the whole order and savors of immortality. To have our present life and labors perpetuated to all eternity would, for the most of us, be the acme of boredom. Now and here we are filled with discontents and there is no peace. Misfortune, loss, disillusionment hem us in on every side. To think of this as everlasting would be to contemplate calamity. How can we change it? By reaching beyond time. By an act of faith which will make us a living part of the life-forces of time and eternity. Knowledge? What is that? Knowledge is only of things we see, and may be compassed. Faith takes hold of that which does not yet appear, is a portion of the forces of life and progress, links us up with creative power, brings the nonexistent into being. The creative life can never be boresome. Read the long roll of the world's geniuses who through faith wrought righteousness, stopped the mouths of lions, out of weakness were made strong, put to flight the armies of the aliens, and in their echoes hear the bugle call to a larger world, to *your* larger world.

CHAPTER XXXVII

The Mills of God

The system we have attempted to outline contains the implications of a moral universe. If all things are linked together in an intricate system; if the initial stages of creation and evolution have portended the coming of man, and the ultimate appearance of spiritual man; then, the coming of the Ideal Man, the Christ, may be looked upon as the central fact of human history Such a claim is a bold one and carries tremendous consequences to thought. In the first place, it demands of Christianity a universality, which so far, her organized institutions have not achieved. There can be about the universal religion nothing which is merely local, provincial, national or racial. Institutionalized Christianity must measure up to universality, or failing this must be looked upon as one among other religions. In other words it cannot claim exclusiveness until it has become all-inclusive. By this is meant a capacity to embrace all men in its love, and to accord full value to their best efforts after the understanding of God, their ethical achievements, and their attempts to do the Divine Will.[1] Christianity is called upon to establish its universality, not by its claims, but by being universal in practice, attitude, and life. Men cannot be convinced by being talked down to. They must first of all be listened to and understood. So far, organized Christianity has shown a great unwillingness to listen. Yet to listen is to be listened to. In the second place, and what is more easily demonstrated, the ethics of the Founder of Christianity must be shown to be supported by the nature of man and the constitution of the universe if it is to make initial appeal to all men. Christians have too generally abrogated the support of nature which was rightly theirs, and which has given such lingering strength to the animistic religions, false as they may be. This weakness appears to be an inheritance from Judaism which revolted from the animism of the tribes by which it was surrounded. It was the Prophets who led the revolt against tribal and animistic religion in an effort to free their people from the taint of idolatry. In the then state of knowledge there was no other way. Nature, as then interpreted, was the enemy of spirit because it was belief in

[1]See the author's article: "The Holy Catholic Church," *The Personalist*, July 1937.

demonic magic, devil worship. Out of this situation arose the theological conflict between nature and the supernatural, which hereafter engaged in unending warfare. What could not but appear, in the days of the Prophets, and with their understanding of nature, was that the righteous life was abnormal, unnatural, out of keeping with man's nature. The religious life came to be considered hostile to all creation. The good man could only wait to be snatched from earthly surroundings to a nirvana of blessedness. Nature was vile and under a perpetual curse. This substitute for animism was not recognized as being only a survival from the pagan view of evil spirits lingering in natural objects. The point overlooked is that man is a child of nature, and that both man and nature have their source in God. The difference between man and the rest of nature lies in his possession of higher functioning powers. In nature there is a scripture that all men may read: The living organism must function according to its higher powers or die. In the natural world that text is as irreversible as its human corollary: The soul that sinneth, it shall die. What Christianity demands, in order to be convincing, is that the ethical laws it lays down shall be seen to be as natural and as inexorable as the laws of the natural world. Such is the heart of its modern evangel to men, in a day when science is opening to us new powers that have the thrill of the intangibly miraculous. "The Mills of God" are those imponderables of the spirit in the light of which sin is an abnormality, bringing decay of powers, and righteousness alone can bring the normal fulfilment of man.

Function and Responsibility

A point of great importance to our discussion is the relation of function to responsibility. Everything in the world of nature and of life is born into relationships toward which it must function if it is to live. Any failure of the plant to make natural response to the sun, the soil and the rain would exhibit an abnormality, would be unnatural. The existence of functioning powers demands functioning activity if any living thing is to maintain its status. The spiritual functioning of man in accordance with his powers is necessary to his full existence as a man. In the plant there is no freedom, so it cannot refuse to function in accordance with favorable or unfavorable conditions. Man can choose or even create his environment, and the possession of capacities for spiritual living is the proof that by nature he is divine. With the capacity comes the responsibility to live after the spirit, and this must be considered the

normal life. A life of wickedness is a diseased life, showing the abnormalities of stunted growth, maladjustment, and faulty response. This abnormality or unnaturalness in man is due to his own wrong choices, for no environment can slay the soul without the consenting will of the individual. Every system that denies man's freedom thereby denies his responsibility to realize his higher manhood, and rejects at the same time the nature of morality and the possibility of the spiritual life. The sole condition of the spiritual life is freedom. God will not enter in to constrain man to goodness against his will, because to do so would be destructive of morality and of the Divine purpose as well. If man has the capacity to become God-like at all, it must be through the normal functioning of his spiritual powers.

What may not be so clear to some is the collaboration of his natural environment with man. So frequent has been the repetition of the sentiment that "this vile world" is "no friend to grace to help us on to God," that this perversion of the Gospel has become as sacrosanct in many minds as the teaching of the Founder of Christianity Himself. Yet it finds in those teachings no echo. In a remarkable passage of his book *Honesty*, Dr. Richard Cabot has expressed the essential truth in words like these: "The honest man shares the life by which things exist," and finds his backing in unexpected places. Most of us, he writes, are not honest enough to win this support many times in our lives ... the spiritual constitution of reality which is around us and in us perpetually, is called to our aid by our intense and unaffrighted effort. "We lie in the lap of an immense intelligence which makes us receivers of its truth and the organs of its activity"[1] *provided we do our part*. This sort of religion is as verifiable as the forces of physics. Nature favors the honest builder who incorporates her laws into his structure. She does not show partiality to the man who carelessly builds his house upon the sands, however repetitious his prayers. In the Gothic cathedrals one finds carved in the stones the symbols of the masons who chiseled and laid them, each man standing by the honesty of his work, and happy to be known by it. Built for the Queen of Heaven and her Son, they were intended to last until time should be no more, even from the lowliest and humblest monolith in the base, to the capstone, resting on the foundation of the Apostles, Prophets, and Martyrs. One essentially significant fact in their perpetuity was not so much that they were dedicated to the Lord of Heaven and put under his care, but that they were laid in conformity with natural law, which

[1]Macmillan, N. Y., p. 307.

was also His law. They stand not by magic of earthly rite, but by obedience to nature. When betimes the straining after effect in a spirit of emulation led the architect to transgress the essential honesty of the arch, it fell, not sparing even the Holy of Holies. Religion must accord with the constitution of man, with the will of God, and with God's law of nature.

In the light of these facts nothing could be more unfortunate nor more subversive than to dream that by some trick or magic, the harvest of the good life is to be achieved without goodness. If goodness seems too absolute a term to appear possible of man's attainment, at least the active intent to goodness, according to one's best lights and willing conformity to the will of God. God and nature cannot be mocked successfully, and the seed which is sown inevitably brings its harvest in kind.

Normal Life, the Best Life

Outside of academic discussion, behavioristic psychology, or the underworld, it would be impossible perhaps to find a field in which the worst and poorest specimens were taken as the norms for judgment. A single visit to the county fair should help to establish this fact. Here, in fruit, flower, and animal, new norms are sought after by the production of superlative qualities. It is not the practice to pick out the puniest specimen and to say: This is what one must expect. There is no worship here of a doctrine of total or even partial "depravity." Not even a momentary satisfaction is derived from the contemplation of weakness and imperfection. Neither is it allowable to paint or unnaturally color the products of field and farm. Nature's own hues are demanded. If there are appearances of original "sin," the object is to weed out and reject such specimens in favor of the normal and perfect. There is, no doubt, a difference between the normal and the "average" specimen, but no excuse is made for it, nor is it complacently accepted as necessary and to be expected. The spiritual capacity of man is the norm of his activity, and Christ is set before the Christian as the normal man, a fact often forgotten. One reason why we have overlooked it is because we have too long been taught that to be natural is to be wrong. The natural was assumed to be easily achieved without Divine assistance. The presence of God not only in the creation but in the ongoing of the world was unrecognized. He was thought too great, too Absolute, to contaminate Himself with the wicked natural world. In such manner as this was the great fundamental of the Christian revelation abrogated; the meaning of the Incarnation of God in

Christ. What further was not seen was, that if the world of nature does not speak of God, then the Devil, the Spirit of Evil is its creator. Such is a plain lapse into Oriental and pagan animism, or of Zoroastrianism from which it is generally derived in the West.

Should the question arise as to what keeps us back from the normal functioning of spiritual men and women, it must be answered that character demands freedom and is to be had at a price. It is only by voluntary choices that we can work our way out of animality, or what we call animality. It is something worse than animality, however, for animality is innocent, being unaware of moral obligation. Man is never free from such awareness. The possession of moral sensitivity, which is natural to man, lifts him above the innocent plane of the animal. If he resorts to what is called animality, he is not an animal, but worse, a fallen angel. We have fondly thought that by dropping to the lower level of action we were merely being natural, and therefore excusable, but we were in reality being unnatural in sinning against the higher nature potential within us. The divine capacity demands the divine life, and man's true nature is his highest nature. If we are betrayed, it is not nature around us or within us that betrays us. Our "fifth column" is within us by reason of our invitation, our evil choice, our coddled and cultivated "affections and lusts." The teaching that it is natural to be evil has had unhappy repercussions within the field of theology, and has also widened the gap between religion and science, making them appear hostile and contradictory when they shouldn't be. No truth in any realm and part of the universe can rightly be held to negate or contradict any other truth.

The Sense of Sin

The sharp dichotomy of the world into two parts, one of Nature and the other of Grace, while intended to increase the consciousness of sin, has had, historically, the opposite effect. The separation of the individual soul from nature, as if the latter smacked of evil, has led to the interpretation of religion as an extreme otherworldliness, impossible except for those who withdraw, yogi fashion, from the life of the day, that none of its thoughts should creep in. What it really produced was an increase of secularism on the one hand, and of sacerdotalism on the other. The immediate tendency was to set up artificial standards of "sin" under the name of "worldliness," to make a distinction between the morality required for the layman and that for the "religious," and to define as sin nearly everything that gave joy or delight. Crucifixion of the flesh became one evi-

dence of religion without demand for further credentials. For its own sake, and to further personal salvation, without regard to the service rendered to others and to the world, was the pernicious disease of this type of religion. It bears within it such possibilities of selfishness as may entirely negate the religious life. The underlying idea was that one must forego happiness in this life in order to enjoy a very mundane kind of happiness in the next. Earthly wassail, necessarily temporary here, was renounced in order to participate eternally in "the shouts of them that triumph, the songs of them that feast." The place was changed but not the ideal. Short indulgence was surrendered in the interest of everlasting indulgence. Many acts were indicated as sins, and consciences cultivated toward them, that calm, level, and intelligent appraisal did not disclose to be either harmful or important, so long as they were incidental, and did not become the dominant pursuits of life. At the moment these artificial sins loomed in seeming importance, fundamental righteousness, truth, loyalty, and honesty were often forgotten. Ancient Phariseeism came marching in again, and the presence of phylacteries, obvious prayer, pious demeanor, and meticulous tithing took the place of the love of righteousness. Pious externals were made to cover all sorts of hatreds, jealousies, backbitings, censoriousness, competitive ambitions, unjust judgments, and general unloveliness. Religion, identified in popular thought with externals, forms, professions, and institutions, exercised a weakening hold upon the lives of men. In the light of these facts which he who runs may read, the main efforts of organized religion seem too often to be the increase of the *number* of conformists without augmenting the ethical qualities of those already "within the fold."

In the meantime, another factor has been operating: the growth of the scientific spirit, and with it the new appreciation of nature. The advances and discoveries of science have disclosed a world which is not hostile, but rather, friendly, to the welfare of man. It became apparent that much of disease, suffering, and misery proceeded from a world of nature friendly to man, but hostile to filth, insanitation, unnatural living, ignorant and unsocial practices. She was the friend of those who obeyed the laws of their own higher nature. In fact, Nature, instead of being demonic seemed anxious to be a healer if given a chance. Plagues appeared as not due to the capricious acts of God or Devil, but to man's own faulty or sinful habits. In many cases unassisted nature was found to be the best doctor. All that she demanded was collaboration. There thus grew a change of view from the concept of a diabolical natural world to

one that was, under certain stern conditions, man's best friend. This discovery further undermined the sense of sin that had been built on ancient artificialities and religiously cultivated.

It is quite true and deplorable that the modern world has lost its sense of sin. It is not deplorable that it has lost its sense of guilt respecting artificial sins. That is quite to the good, much as it may be deplored by some. What is needed is a burning sense of the sinfulness of real sins. Men are not going to be horrified, nor can they be frightened into goodness by emphasis upon artificial transgressions, which are merely disobedience to prevailing customs and forms, and are too often the cloak for an inner selfishness, greed, avarice, and ill will. There is need that the sense of sin should be restored, but it should be characterized by a revulsion at the sinfulness of lives which cling to the great immoralities of worldly and spiritual pride, lust, anger, gluttony, envy, and sloth, known as the seven deadly sins. These are disintegrating to the personality of man, and keep him back from true self-realization. How can the lost sense of sin be restored? The discussion must be deferred to a later section.

The Holy

The claim is frequently made that contemporary man has, with the sense of sin, lost the sense of awe, a consciousness of the holy. This can scarcely be refuted because the two go together. That being true, the same forces that have produced the one, may very well have brought about the other. One reason for the loss of the sense of the holy is that we have placed it so far away from the daily experience. It was something so awful, so far away, so foreign to human personality, that it should be viewed only with "fear and trembling," as Kirkegaard put it. The first essential to awe was to be the debasement and loathing of man, to enhance the sense of the Divine goodness. Such a false humility the person could not feel without a sense of degradation, such as was had in the presence of an Oriental monarch. The Divine goodness did not need such enhancement. Better than this was the advice of the Lord in response to Job when he began to depreciate himself. Jehovah ordered him to gird up his loins like a man, to stand on his feet before God and listen to what was being said, as from one person to another. The mock humility aspect of the Holy is not good Old Testament, to say nothing of Him who thought it not unbecoming to call Himself the Son of God, and to declare that they who had seen Him had already seen the Father. Much that even yet passes as deeply re-

ligious is a harking back to an ancient idolatry which it was the purpose of Christianity to displace. If God is to be made to appear as little less than demonic, with something of a lust for blood, rejoicing in the suffering of the damned, there is perhaps nothing for man to do but to fall on his face before such a tyrant in an agony of adulation and self-loathing, at the expense of character. Such an attitude belongs more properly in some of the "pagan" temples the writer has visited. That concept of God emerges quite naturally from philosophic absolutism, but it has more affinity with animism than with Christianity.

The fault in this case is to be seen, not in the cultivation of the sense of awe, but in projecting it toward the wrong object. Would we find God? His highest expression is not in the far-off heavens, though he *is* there, but in the heart of man, which is his real temple. Would we reach the heart of God? We can find him at the heart of the world. All nature "flames with the awful immanence." "The voice which speaketh low in every heart" is the Holy Ghost, and whether one be trinitarian or unitarian, it is still the Voice of God. We pass in and out of the shrine of the Holy, day by day, and hour by hour. And how do we conduct ourselves? With irreverent and impious feet, because we bear our Shekinah with us, it is so close. God speaks, and how often do we listen? He presents Himself over and over again in opportunities for righteousness, for deeds of love and compassion, for daily crosses and Calvaries in constant human associations. We are like those who, dwelling within the temple precincts, become careless of its sanctities. He speaks and we hear Him not. He is present and we do not see Him. Do not these facts embrace the deeper truth and undertone of Jesus' own picture of the Final Judgment? "I was sick, naked, and in prison and ye visited me not." And the wicked answered: "When saw we thee and did not minister unto thee?" They had not recognized the Divine presence where it most often appeared. "Depart from me ye workers of iniquity." Cultivating an awe for a far-off Holy may have made us oblivious to the actual Holy in the temple of personality, a Holy for which we show scant respect. There is no temple that can compare with the consecrated shrine of man's own soul. "Hush, I pray you, what if this Friend should happen to be God?"

Final Judgment

If the fruits of the Spirit, love, joy, peace, long-suffering are the normal products of the functioning soul, they must also be a part of the constitution of reality, written into nature. By stressing too

exclusively a Final Judgment which is to take place after death, men have been made oblivious of The Great Assize which is continually taking place and which they are daily solidifying into reality. The physical judgment upon the Dervish who holds his arm in a single position is to lose the use of it. This sentence on disuse is present in the first day of his experience as in the last, it is only confirmed by the years. The penalty of atrophying muscles is being daily recorded. The last day can only bring the end of hope for restoration. It would be practically unthinkable that after complete atrophy had been reached there would still be either the wish or the power for the individual to recover from his folly. Yet something analogous to such an expectation has grown out of the concept of a cataclysmic Day of Award. In the truest and most solemn sense, every day is a judgment day. We are daily becoming what our loves, our hopes, our aspirations, our acts, and our devotions are making us. If these are not good, our calamity is simply that we are ourselves. The purely secular and wicked soul carries his Hell about with him and cannot escape it except by a change of loves. If we conceive Heaven as a place, and the wicked man transported there, he would take his Hell with him. Himself is Hell. Heaven would be to him the most insufferable of all places, since it would carry the constant reminder of all that he was not. All that is heavenly is already hateful to him. If now we return to the question about the revival of the sense of sin, it would seem to lie along the line of showing man what Hell may be, by resort to the inexorable working of the forces of nature, which no one can gainsay or deny. The drawback to a life of evil is that we have always to live with ourselves, we cannot escape ourselves. We cannot escape being what we have made ourselves. Our only hope is in the love and practice of goodness, and we turn away from righteousness at a deadly peril. The result is not a far-off one, but is here and now giving the set and eternal character to life. We cannot afford to dally with the pleasantest sin, for it is taking something out of us that is demanded by our better personality. Only fulness of life can keep us from a sense of frustration.

In cooperation with these facts is the nature of life and the universe. The liar creates about himself such an atmosphere of falsehood that the time comes when he can believe neither anyone else nor himself. In the first place, falsehood becomes so habitual to him that he cannot believe others would tell the truth, and in the second place, his penalty lies in the fact that he begins to believe in his own falsehoods. The penalty of falsehood is to love and cherish a lie.

The liar becomes the foremost victim to his own way of life. The egotist distorts the world of fact to alibi his failures, until he can no longer appraise his weaknesses. The man who hates, narrows his life to the smallness and limitations of the man he hates, building upon that as a foundation, a distorted life, inhibiting generous impulses and destroying himself instead of his enemy. The violent man raises up violence against himself, and often dies "with his boots on." The betrayer can inflict but a temporary loss upon his victim, and betrays himself more surely than anyone else. One cannot be untrue to any man, and not in a deeper and more tragic sense be untrue to himself. Sin is the easy and universal inhibitor of creative impulses. The evil man is driven by a thousand furies of discontent, frustration, and disappointment, and the deepest of all must be disappointment with himself. He finds the stones of the field in league against his peace, peace the most desired boon of man. His wickedness grows in ever-increasing scale, shutting him off from truth, beauty, love and sympathy, with all the inexorableness that Dante represents in Satan, self-enclosed in the Sea of Ice. The ice is but the congealment of his own hatreds. Who would avoid such a fate must love. The outcome of sin against the higher nature is as irreversible as the laws of physics. This is the Final Judgment against all evil doers. Neither theological magic nor ecclesiastical legerdemain can provide escape from "the mills of God." A love of righteousness so deep that we would rather die than surrender it —in other words, the love of God—only this can abide the final reckoning.

V

EPILOGUE

CHAPTER XXXVIII

The Person as Field of Energy

IN THE AGE of greatest miracles man has ceased to believe in miracles. Forced out of dogmatic belief in materialism, his so-solid world is dissolved into inexplicable fields of energy, the sources of which he does not know, the character of which he cannot unfold except by describing the activity of the unseen. We can split the atom but we cannot tell what we are doing. We know only that we redistribute forces that are paradoxically put under the control of the immaterial power of our minds. Ancient man, could he be injected into the modern world, would refuse to believe his senses. One by one we have surpassed material connections to find they were unnecessary. We presumed that wires were essential to the conduction of electricity and we find they are not. The further we go the less explicit are the powers we use. Our air suddenly becomes filled with speeches we did not know were there, and we begin to speak of the reversal of time as if it might be possible to revoke its flight and gather again the voices of long ago. Surrounded by miracle on miracle, wonder crowded with wonder, deserted by the materialistic concepts of yesterday, engulfed in the inexplicable, there remain some who pause only to say: "Wonders? Truly! But no Designer, Maintainer, Intelligence to bring them into being and insure their lawful cooperation!" In one land at least it has become heresy to believe in anything but chance and the purpose of the dictator.

In such a day when man has come to an importance hitherto unrecognized, since the most unscrupulous individual may control powers that can compass destruction, let us make a new effort to define his significance. Evidently the definition of the person must in the present state of knowledge include more than that which Heraclitus dreamed, or Aristotle argued, or Boethius described, or that was but recently conceived by modern man. In a universe, the chief significances of which are referred to powers beyond the senses, the one knowable point of contact between material and spiritual is to be found in man himself. Any adequate description of reality must then include him and the field of his highest creativeness, the world of spiritual values. To misunderstand or to depreciate the importance of these will now be to flirt with de-

struction. May we then be permitted, at the expense of some repetition, to make our final summary?

The Person in Future Evolution

So far as common evolutionary concepts have gone, were we to accept as proved its extreme and unverifiable claims regarding the origin of species, we could account at the most only for that which man holds in common with the animals. Attempts to provide for differences and distinctions by discovering similarities of structure are so obviously question-begging as to appear to all but the least logical mind. A dogmatic hardihood has been unconsciously displayed in the effort to fill in the "breaks" in evolution with undiscoverable "missing links." The utter poverty and bankruptcy of such a concept is now generally recognized even in the house of its former friends. Gene and chromosome bespeak the presence of an Intelligent Planner which only the purblind can refuse to acknowledge.

Man himself is now exhibiting what can be done, not by chance occurrence but by the purposes of immaterial minds, upon the course of evolution in the transformation of characteristics. Add the purposive idea of a Burbank to what chance has been presumed already to provide and ultimately we have the logan- and boysenberry ready to confirm these immaterial choices for the future. Future evolution promises dependence upon the purposive activities of the person himself. Such a forward step in evolution could not be taken by any member of the animal species because of its incapacity for reflective choices. With the directive will of man came the great break in evolution, and that this unaccountable spirit must have sprung from Spirit is only a reasonable conclusion. With the person emerges a new world of freedom and values. This new world of persons, working in and using the material world, has on the side of its highest capacity no visible connection with its material past, cannot be accounted for by reference to anything physical in cell or atom. In its superiority to matter it creates new worlds of meaning and existences, and above all a demand for yet greater worlds. These facts render irrational any assumption of evolution apart from purpose on the part of a Supreme Person who is reflected in the human personality.

The Person as Purposive

That in purpose we reach the fundamental reality, the seat of creation seems apparent. Our most advanced scientists have come

to recognize the fact that in the processes of life as pictured in gene and chromosome we must assume the existence of an Intelligent Planner within and above the process. Here reside powers which go beyond the conscious ability of the cell itself since the knowledge called for in common operations would involve the whole world of relations, both living and dead, organic and inorganic. Such an assumption must carry us still further for it demands that the whole system of relations which we divided into organic and inorganic, should in a real sense also be viewed as an organism. The atom catches its significance not from some static existence but from its relation to all other things, sentient or insentient.

When we come to man we have passed a distinct frontier into a new field of relations not before existent. Here for the first time appears a conscious relationship between the Creative Purpose and the object which it creates, a relationship involving freedom. Along with the gift of purposive self-direction has emerged the capacity to bring into being new existences, new meanings, new values hitherto impossible. What has been behind the world order comes to consciousness within the process. In the exercise by man of creative powers is mirrored the deeper fact of how a Supreme Creator can at the same time be immanent and transcendent. These apparent contradictories turn out to be what Buckham called "contrapletes," essential to every act and present in every person. Every act is unique in the sense that it is peculiar to the person from which it issues marked with the personal qualities of individual education, insight, and will but not absorbing or exhausting the willer who may transcend the act in a thousand ways.

This creative power which lies within the operative control of the person is not, however, a material thing or force. It springs not from the food he eats, the ground on which he walks, the associations which surround him, but has its source in the inexplicable region of the spirit. Here lies the root of every creative act, whether it be the genius of artist, inventor, or saint. Out of the immaterial sources of the spirit spring all creative acts and they rest upon freedom. The next great steps in evolution must find their origin here.

The Person as Field of Energy

Faced by the dilemma of materialism in its study of dissolving atoms, of influences which pass with alacrity through seemingly solid objects, as readily as sunlight through a fisherman's net, science has been hard beset to produce a vocabulary expressive of the facts it has unearthed. The ancient notion of "substance" as im-

permeable, of realities incapable of occupying the same space at the same time, has "gone with the wind." Faced by these facts, science has invented the term "fields of force or energy" to describe what happens. Obviously this is a device to capture and hold for examination, situations which are inexplicable and continually subject to redescription with the disclosure of new relations.

Since science feels no embarrassment in presenting such mental constructs in an effort to understand and the better to manage its developing ideas, there should be no objection to the use of analogous figures of speech to characterize the activities of creative spirit. Here, so far as we can have access to the knowledge of creative powers on the part of human beings, we may be permitted to speak of the person as representing a field of energy in which certain activities are known to take place. Activities of human genius, insights, discoveries, conquests of animal instincts, mastery of will, spiritual values, these cannot be denied without the denial also of that which distinguishes human from animal existence. If now we assume the soul of man to be a field of force in which certain spiritual events take place, like the birth of genius, or the conquest of evil will, or wrong desire, or vicious appetite, it must be assumed that here is a field in which the Supreme Creative Spirit, transcending time and space, can manifest its activities.

Objection to this concept cannot be made on the ground that the Supreme Creative Spirit can be charged with the existence of evil wills, for without potential freedom there could be no moral creativity. Goodness could not exist at all without freedom, for goodness is not a matter of compulsion or fear. If the Supreme goal of existence should be the creation of Godlike persons, as seems reasonable in a moral world, it could come only through freedom, involving the possibility of wrong choices and rebellious wills. For this reason the future lies within the power of persons, and reform and peace lie in human decisions.

Return to an Old Definition of the Person

Startling ideas oft repeated become commonplaces, especially if they hide significances which call for effort, either of thought or morals. One of the outstanding events in spiritual history lies concealed in a conversation which took place nearly two thousand years ago. The language in which it was clothed is still as perfect in its imagery as in its revelation of fact.

Furthermore it accords with a figure of speech which has now become common, reality represented as a field of force, a domain

where events take place. Even in the physical world, its sources shrouded in mystery, its occurrences paradoxical, resort must be had to this figure of speech. Should it be less appropriate in a world of values, a higher scale of reality? The occasion was that in which the Young Ruler came by night to learn the secret of personality. Whence comes the adequate, the satisfying life? The new life depends upon lifting life to a new scale, exposing it to new energies. Here the person yields himself to new influences which constitute for him a new type of existence. Physical life comes by birth on the animal scale, if the individual is to realize his human possibilities, is to become a person, he must aspire to the height of his human calling. It is like being born into a new world of influences and atmosphere. How shall this come about? Its origin is as invisible as the sources of the wind. One cannot tell whence it cometh or whither it goeth, but the fact of its existence and its effect is indubitable. "So is everyone that is born of the Spirit." The source of spiritual fact like the sources of genius in painting, poem, bursting insight, or revelation of truth, lies shrouded in mystery. The product is not only a reality, it is a reality shot through with energy as a vital cause in its effect on other minds, a two-edged sword; it brings men to self-definition where they recognize the field in which they should choose to abide. By the exercise of freedom the person may rise to a new status, a new order of being where the highest creative forces are at work and may find full play in him.

Escape into this personal standpoint would seem to be the final purpose of moral evolution since here alone man can achieve the maximum of creativity and the fullest use of personal powers. To this end was he born and for this cause he came as a potential human being into the world. Only as he rises to the full mastery of himself does he achieve the mastery of his world, and this only as he yields to full captivity by this Spirit of life, entering on a plane of action in which old motives and ambitions pass away and all things become new.

The Supra-material Age

In a recently reported interview entitled "Only Then Shall We Find Courage," Albert Einstein calls attention to the world-wide changes that have come over our civilization to demand a new order of thought and action. The present chaos is apparent on every side. Old political shibboleths are no longer adequate. Our deepest sense is one of frustration, disillusionment, and fear. The amazing progress of science with its increase of material comforts has built up

in two generations a confidence that economic welfare can bring the solution of our most pressing problems but, so far, it seems only to emphasize the distresses of multitudes of human beings. At the moment when better conditions seemed on the point of universal realization, the dream has been shattered by the dedication of scientific discoveries to purposes of destruction because our spiritual achievements have not kept pace with scientific invention. So certain were we that scientific knowledge would not be put to immoral and antisocial uses that we had built for ourselves a fool's paradise. Of this debacle there had been many signs of which we had refused to take notice. For evidences of the degeneration of our civilization we needed only to note the vulgar tone of our literature, its repudiation of moral conduct, its lewd pursuit of the desires of the flesh; the blatant picturing of crime and disorder dished out by the cinema and heroized for the lengthening queues of our babes; a new reign of narcotic and alcoholic addiction in our adolescents; the irresponsible confusion of our artists who seek originality at the expense of meaning and ugliness; the blindness of our philosophers, willing to forsake the field of reason, morality, and the considered life for the barren wrangling of logical dialectic, hoping thereby to qualify as "scientific" long after their concepts have been discarded by science as untenable; an ecclesiasticism, overawed on the one hand by scientific dogma into a timidity fearful of rebuking the sins of the proud, and on the other hand holding a false defiance of scientific truth and discoursing of artificial sins and easy damnations, an orthodoxy approaching at times a devil worship with a concomitant of rattlesnakes. An age of such paradoxes has suddenly come face to face with the end of an epoch, an era whose problems can be met neither by moral flabbiness nor by fanatical but ignorant zeal.

Professor Einstein calls us to a new order of thinking, but it is a question whether he, or any of us, has fairly begun to realize the implications concealed in his statement. There are still many of us so comfortable in the midst of a madhouse world that we calmly repose in the confidence that history will turn back for us the pages of yesterday's pattern with here and there merely an added marginal gloss. Others obsessed with the importance of some wild panacea hope to bring in a kingdom of God without an inconvenient attention to righteousness or personal sacrifice, substituting therefor correct opinions or pious forms. The simple relation of cause to effect should be sufficient to convince us that there must be drastic changes in our attitude toward life, for we live now in a society

whose smugness has been destroyed, the relations between men and nations violently overturned and old ways of meeting world crises have become obsolete. As the Macedonian phalanx upset the world of Alexander's time, and the longbowman of England displaced the lancer, and the invention of gunpowder outmoded the castle, so now the atomic bomb brings the end of an age and leaves us standing drunk on the verge of possible destruction. The problem of survival has, in this day, become the problem of the moral person. No future war can be localized to areas and groups for all may rest upon the decision of one man—without conscience but with an atomic bomb. A new orientation of life toward its higher possibilities is demanded. The problem is moral and spiritual and only by meeting it in the high field of spiritual force "shall we find courage."

We have now gone as far as we can get on the basis of materialism alone. Each additional discovery can only increase the moral dilemma. "The Spirit of the Power of the Air" on which we now call has capacities for universal deception never before known in its reach to all mankind in an age of lies. We cannot shout loud enough to outvoice the spirit of evil for it wills not to know the truth. Wilfully misshapen minds and distorted souls lead the multitudes astray and at the same time command destructive powers. Without an actual manifestation of internationally disinterested kindness and love, the battle for civilization cannot be won. We must free ourselves from motives of social or political selfishness and rise to the supra-material level of action. Every grafter must be seen as the most dangerous of enemies, working from within. As science has surmounted materialistic concepts to seize invisible sources of power, so must moral faith begin to operate with respect to belief in the power of righteousness, the strength of good will, the convincement of integrity, honesty, care for the welfare of men, sympathy for the starving, ignorant, and unhappy masses. Every person must be viewed as the possessor of inalienable rights, the bearer of inviolable gifts.

There are, however, certain mileposts to be reached before we can enter upon the supra-material age. There must be honesty, without and within. No construct of lies, though we pile it to the skies, can ever be strong. However massively we build it, "one little word" shall fell it. When truth appears, the most colossal structure will fall like a house of cards. The higher it is piled, the greater the collapse. Let us not dream though that the most conspicuous liar is the only one. We have house cleaning of our own to do. The lapse

from business integrity, the feeling that profits justify any means, moral blindness in high places, political graft and intrigue, witch-hunting, and wilful falsehood to destroy competitors; whatever "loveth or maketh a lie" presents a weakness in our political and social fabric more dangerous than the worst lies of our enemies. Among the betrayers of our peace is the principle of exploitation, making the weak carry the burdens of the strong; the sufferance of race and religious bigotry with its adamantine indifference to the rights of others. These are the Quislings within the gates more perilous than the weapons of the enemy. In the last analysis, we can be betrayed by ourselves alone. Standing on a foundation of honor and integrity we can conquer any foe. The dereliction of a trusted leader can be more disastrous than the losing of a battle, for when faith is lost, all is lost. We have lived too much by "the main chance" and have called it good. The problems that now face us cannot be settled on that basis. The future society must be viewed from the standpoint of world-wide needs and demand a courage and acumen which do not arise in animal souls. The problem centers in the person. "We shall find courage" only in the higher ranges of personality, the region of convictions, of emotion, of loyalty to truth and righteousness at whatever cost. Moreover, these loyalties must embrace the last and feeblest and most ignorant, even the degraded and the criminal. The measure of our response toward the last member of society is the measure of our civilization.

To an age surfeited with things such a program must seem quixotic and impossible. "Who," it will be said, "is sufficient for these things?" But the supra-material soul of man is a field in which the Eternal Spirit manifest in all life can act eternally. Recently illustrated in the daily press was a mountain fire. Following a long and severe drought, the chaparral was dried to the point of explosion. Then some pyromaniac tossed a burning cigarette and the whole mountain seemed to burst suddenly into flame. The photograph shows each tiny bush of the millions tipped with its little blaze. Dire circumstances in a world of universal communication may turn the minds of men to the only field in which their deepest problems can be solved. We may not need to abide the tedious processes of rational conviction, for beneath the surface of our common experiences the silent forces of life have been preparing—life which can defy the law of entropy. "The spirit of man is the candle of the Lord."

Glossary of Terms

ABSOLUTE—The self-existent Cause or Ground of a dependent world, never as the "unrelated" or the unlimited, embracing the entire universe Its limitation is strictly a self-limitation.

ABSOLUTISTIC PERSONALISM—The ascription of personality to the Absolute Applicable to those personalists, who, like Hegel, Mary Whiton Calkins, Hocking, Bosanquet, Bradley, and Royce ascribe personality to an Absolute

ACTIVISM—The continuous creative willing underlying all reality An unceasing divine activity which is a sort of Occasionalism. Personality as free activity. Charles Secretan: "To be is to act." Blondel, *l'Action.*

AESTHETICS—In personalism aesthetics is based upon the assumption of a basic Intelligence in the nature of things and persons. The aesthetic interest is thus satisfied through harmony between the person, the personal world, and the World Ground.

ANTHROPOMORPHISM—The natural result of any conception or perception of the world, since all ideas pass through the alembic of personal interpretation. Never wanting from either phenomena or concepts

ATHEISTIC PERSONALISM—The theory that reality consists of a society of persons, but that the Absolute is not a person, though only persons are real. "Nothing exists but persons connected in a unity," J. M. E. McTaggart as quoted by Knudson, *Philosophy of Personalism.*

ATOM—The smallest organismic unit of being, as an activity; sometimes described as an event in a space-time continuum.

BECOMING—The active creative process through which the world is being created from moment to moment.

BEING—An academic concept for purposes of dialectic, since personalism holds that being is never unrelated or unconditioned.

CAUSE—

1. Phenomenal—The order of succession in phenomena.
2. Efficient—The free activity of a person, human or divine which furnishes the key to the solution of the problem of causation.
3. Final—In which the purpose of free activity is present.
4. First—The supreme activity of the World Intelligence or Ground.

CHANGE—The succession in phenomena, having meaning only to a self-identifying person.

CONSCIOUSNESS OF CONSCIOUSNESS—The identifying mark of personality and the distinction between man and animals.

CONTINGENCY—The concept opposed to determinism, which holds that free activity may enter causally into natural processes.

CONTINUITY—A relation which the mind sets up between events, and which passes beyond the finite person to find its ground and validity in a Supreme Person.

CONTRAPLETES—The two opposites or poles of a relationship standing over against each other and at the same time fulfilling one another. Term first used by J. W. Buckham. Polarity, Dyadism, Harmony of Opposites.

COSMOLOGY—The physical world is held to be a system of means provided for the sake of the realm of ends. See Ward, *Realm of Ends*, p. 252.

CREATION—The continuous creative activity of the Supreme Person momentarily willing into existence the whole of nature. The creative act of a personal will.

DEMONSTRATION—Satisfaction of mental inquiry by placing an event in its orderly relations, having authority only for those who admit these relations.

DUALISM—The distinction between thought and thing which personalism proposes to solve through assuming a Supreme Creative Intelligence as the common source of all reality.

DURATION—A form of thought by which we gather events into meaningful relationship, having no existence apart from a self-referring subject of experience.

DYNAMISM—Doctrine of an inherent energy grounded in a Supreme Intelligence.

ELAN VITAL—Term used by Bergson to denote the source of efficient cause and evolution in Nature.

EMPIRICISM—The theory that experience is the source of knowledge, the person being an essential factor in such experience.

EPISTEMOLOGY—That of personalism holds to:

1. A dualism of thought and thing, resolved ultimately through the World Ground.
2. That all thought is a creative activity.
3. Reason is a trustworthy guide.
4. The practical reason is superior to any form of logic.

ERROR—Misinterpretation of fact which would be impossible to any form of monism, materialistic or idealistic, existent only in freedom.

ETERNAL—Having a functional relation to the temporal process, but not out of all relation to time and change. An expression for the permanence of value during the passage of time.

ETHICS—The science which finds the sources, principles, and ideals of conduct based in the free nature of personality and the World Ground.

EVIL—

1. Physical suffering or pain, whose alleviation is a spur to progress.
2. Wrong moral choices, possible in a system of freedom.

EVOLUTION—Development in Nature from lower to higher, rationalized only by assuming a time-transcending Purposive Mind, in the process.

EXISTENCE—A state of perceiving or being perceived dependent upon the continuous operation of a Creative Will.

EXPERIENCE—Perception by a self-conscious subject by which he arrives at knowledge or conviction of any kind.

EXPLANATION—Relating a fact or event to its efficient cause in a personal will.

FINALISM—The theory that purpose is present in all events. Teleology.

FREEDOM—The power of choice by persons between possible courses of action. Held by some as possible only in the choice of good, as by Ravaisson.

"GIVEN," THE—Term employed by Brightman to indicate an obstructive element in being, which hinders or limits the Divine in achieving His purpose. The doctrine of a limited God.

GOD—Living, both immanent and transcendent in the world of being; personal as a self-conscious, self-directing center of experience, with the power of self-limitation to achieve His purposes. Physical form or existence is not to be held essential to personality.

GOOD—A real value dependent on the reality of freedom, belonging intrinsically to persons, applied derivatively to the conduct of persons and metaphorically only to objects.

HUMANISM—

1. First used as a *philosophical* term by the late F. C. S. Schiller, as antagonistic to both Naturalism and Absolutism. Holds human problems as the central concern of philosophy, and identified by him with personalism. *Mind*, N.S. 121, p. 110.
2. Used by the Greek and Roman for the process of educating into its true form, true human nature.
3. Applied to the movement for classical learning connected with the Renaissance.
4. Assumed by J. S. Mackenzie for his type of Absolutism, and by Lord Haldane for his system of thought.
5. Used for a more classical, less "modern" type of education by Irving Babbitt and Paul Elmer More.
6. Applied to the anti-theistic position recently popularized in America.

HYLOZOISM—Belief in the presence in all being of a Supreme Creative Will.

IDEA—A mental event, a creative act in the experience of a person.

IDENTITY—Formal identity is a recognition of the comparative permanence of a given set of relations in an object, or a series of objects or events. In the physical world, identity can be only one of meaning, or mental construct. Real identity occurs only in the self-referring subject of experience, the person. See Permanence.

IMAGINATION, CREATIVE—The power of the person to visualize patterns of action which may become strong enough to override the will under stress, the will having been previously set by entertaining the action pattern.

IMMANENCE—The presence in the natural order of the Creative Intelligence whose transcendence is a necessary complement and charter of personality.

IMMORTALITY—Persistence of the time-transcending personality, time being the form by which it relates events to each other and itself.

IMPERSONALISM—The opposite of personalism. The mechanistic conception of the unconditional regularity of nature. See Stern, *The Personalist*, Vol. 17, p. 238.

INDIVIDUALISM—Discreteness. Emphasizes the individual apart from society.

INFINITE REGRESS—Tracing events from cause to cause in unending series, arriving at last in Unknowable thing-in-itself. Infinite regress is ended only when traced to the free volition of a person.

INFINITY—Whatever surpasses describable meaning or comprehension.

INSPIRATION—Impartation of an idea, emotion, or mental influence through the functioning of the human organism, or the Divine Spirit.

INTELLIGENCE, CREATIVE—A term for the presence of self-consciousness, self-direction, and purpose in the creative processes of the world.

INTUITION—Knowledge acquired by other than conscious inquiry or learning, the result of unconscious mental processes, or inspiration.

INTUITIONISM—The standpoint of Bergson contrasting intuitional with rational knowledge.

JUDGMENT—The act by which the mind transcends itself as a mental event and posits a system for which our thought is valid but which it does not make.

KNOWLEDGE—The result of that activity by which the mind apprehends reality.

LIFE—In the lower forms, a functional adaptation to environment, selective activity, rising in its higher forms to consciousness and consciousness of consciousness, providing for purpose and continuity.

NATURALISM—A belief in the competence of matter and motion to account for all reality, denying evidence for the existence of a creative or upholding spiritual principle behind the world. While ordinarily it may be assumed the opposite of personalism, the latter may be considered naturalistic in assuming the laws of nature to be the uniform activities of the Creative Spirit.

NEO-CRITICISM—The designation of his philosophy by Cournot, and in the early stages of his thought by Renouvier, who later changed to "personalism" as the more exact title.

NOUMENA—A logical concept used of a supposed substance behind the world of phenomena, but itself having no ascertainable qualities.

OBJECTIVITY—The meaning ascribed to that form of reality which can affect the senses.

OCCASIONALISM—That system by which God is conceived as the intermediary between thought and act. In personalism, nature itself is conceived as the continuously repeated act of the Supreme Creative Person. Act and thought find harmonization not in miracle but in the nature of being.

ORGANICISM—The term applied to the system of Lossky who conceives the whole of nature as an organism.

ORGANISM—A living, self-functioning, self-adaptive, selective entity.

PANTHEISTIC PERSONALISM—The doctrine that reality consists of a Supreme Reality of which the world of persons is a part, the Divine Reality having no existence separate from its creation. Described by Stern as "critical personalism."

PARADOX—The apparent contradiction in many phases of existence but which may be a true contraplete, or harmony of opposites.

PERMANENCE—Permanence of meaning as ascribed by the person.

PERSON—A self-conscious unique unity capable of reflection upon its conscious states, of self-direction and transcending time. The self-identifying subject of experience, possessor of intrinsic values and creative powers. A continuum in a time-space world.

PERSONAL IDEALISM—Affirmation of reality in the person and the personal nature of the World Ground. Synonymous with Absolutistic Personalism.

PERSONALISM, CRITICAL—The term used by William Stern to define his concept of person as applied to the organic whole of existence.

PERSONAL REALISM—Emphasizes the metaphysical nature of personality, its continuous activity in natural phenomena, and its unanalyzable or realistic character as experienced fact, the ultimate real. Term used by James Bissett Pratt and Ralph Tyler Flewelling.

PERSONALISTICS—Term used by William Stern to indicate a study of the facts that are true of man as a living, meaningful whole—a fundamental science of the human person.

PERSONALITY—The character attaching to the activities, habits, choices, and reactions of a person.

PHENOMENOLOGICAL PERSONALISM—Applied to the system of Max Scheler.

PHILOSOPHY OF CHANGE—The theory that change itself is the only enduring principle and the fundamental reality. Applied to the views of Heraclitus and in modern times to those of Henri Bergson.

PHILOSOPHY OF DISCONTINUITY—The theory that the principle of change is the fundamental basis of reality; that natural law is the outward aspect of what is internally habit. Being as an irreducible synthesis of possibility and action. God the Creator and Essence of things. Applied to the thought of Renouvier, Boutroux and Lachelier.

PHILOSOPHY OF EFFORT—The theory that in the self-consciousness of effort the person becomes one with reality. Consciousness of effort is self-consciousness. Used by Maine de Biran.

POLITICAL PERSONALISM—The doctrine that the state is under obligation to provide opportunity for the highest possible self-development of each citizen. A movement in France represented by the late Emmanuel Mounier and the journal *Esprit*.

POTENTIALITY—An expression denoting the presence of powers not at the moment in exercise. Unintelligible apart from personal purpose.

PRAGMATISM—Implies the supremacy of living interests and values above those of formal logic. Life is held the best commentator on reality.

PROBABILISM—The denial of mechanical continuity in nature and the affirmation that the only continuity is one of purpose. Set forth by Cournot.

PURPOSE—Exercise of the power of self-direction by a person toward an imagined object. A possible course of action not yet acted on.

REALITY—That which can act or be acted upon.

REALM OF ENDS—The cosmic order viewed as a means for achievement of the Supreme Person of higher purposes.

REASON, SUFFICIENT—Practical reason, demanding a cause adequate to the effect which is discoverable only when the purposive element is disclosed.

RELATIVITY—Denoting in metaphysics the relational character of all reality; in epistemology, the interpretive nature of knowledge; in ethics, incompleteness of moral ideal and achievement.

SELF—The person or soul realized in self-activity as self-referring, thinking or willing.

SELF-DETERMINATION—The act by which the person chooses between courses of action.

SINGULARISM—The theory that there is only one existent, the Absolute. Used by A. E. Taylor. Absolute Idealism.

SPIRITUAL PLURALISM—Implies the independent reality of free persons in the cosmic order.

SPIRITUAL REALISM—The theory that only the good will is free. Causality based on spiritual activity. Self-forgetfulness the way to self-realization. Ravaisson, Lachelier.

SOUL—The self-active agent or person.

STRUCTURE—Applied to the cosmic order as an organism. Boodin.

SUBCONSCIOUS—A term used to designate those portions of consciousness below the level of immediate attention.

SUBJECTIVISM—The concept that all perception is relative to the perceiver. Inaccurately ascribed to Berkeley who was really an objective idealist, the Divine Being furnishing the objectivity.

SUBSTANCE—In personalism, substance is the Divine creative act, willing into being those realities apprehended by the senses.

TELEOLOGICAL PERSONALISM—Applicable to the personalism of Howison and Lotze, affirming that God is to be thought of not as First, but as Final, cause.

TELEOLOGY—The doctrine of an indwelling purpose within the order of nature and its processes. Implied in evolutionary theory.

THEISM—Used synonymously with the term "personalism."

THEISTIC PERSONALISM—The theory generally held by personalists that God is the Ground of all being, immanent in and transcendent over the world of reality. Pan-psychic, but avoids pantheism by asserting of the complementary nature of immanence and transcendence. Used to describe the personalism of Frazer, James Ward, Balfour, Pringle-Patterson, J. Cook Wilson, Rashdall, Sorley, C. C. J. Webb, Eucken, Ladd, Bowne, Brightman, Knudson, and others.

THOUGHT—The creative act by which the person becomes conscious of himself, or the world of meaning.

TIME—The form of thought by which the person relates events to each other and to himself. Transcending individual time is the relation which the Supreme Person bears to succession in events.

TRANSCENDENCE—The essence of personality by which the self escapes complete identity with its acts. The person is both immanent in and transcendent of his acts.

UNIVERSE—The aggregate of being, acquiring unity from its source in a Supreme Creative Intelligence.

VALUES—Elements in the supreme reality of life due to the response of the Divine or finite person to stimuli which originate in and for a self and others. God as part of the finite consciousness and experience is the supreme human value.

VITALISM—The concept that life is itself the only reality and the source of causation. Compare the Probabilism of Cournot.

VOLUNTARISM—Emphasis of the reality of freedom, that the universal essence is will. To will is to be. Free activity is personal. Secretan.

WILL—The act of a self-reflective person toward a desired goal.

WORLD GROUND—The Supreme Creative Intelligence conceived as the continuously active source and ground of reality.

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