

ANOTHER LOOK AT INDIVIDUALISM

EARL C. KELLEY*

IT IS LIKELY that few subjects have been more thoroughly discussed, in conversation and in writing, than individualism. The topic is of great interest to many people. Some see individualism threatened by socialism and communism. Others fear the encroachment of the machine, with its power to force conformity. Still others view with alarm any economic system for fear that it will make robots out of them. Some cherish the notion that they are self-made, like to beat their breasts and proclaim the glories of their achievement.

Discussions of the political, or economic, or religious man depend upon the bias of those doing the discussing. They often become emotional, and are loaded with propaganda and indoctrination. They too often depart from the scientific, and known facts about the nature of the human organism are ignored.

It is my purpose here to discuss what the human organism is like, how it is constituted, and how it functions. Conclusions may then be drawn as to how we may live together. This, I believe, is the imperative problem of our time. Since we have moved together we must learn to live together. We have not yet learned, or so it seems to me, how to do this very well.

* Professor of education, Wayne State University; former vice-president of ISGS; author of *Education for What is Real* (1947), *The Workshop Way of Learning* (1951), and (with Marie Rasey) *Education and the Nature of Man* (1952). This article was originally published as a monograph by Wayne State University in 1962, and is reprinted by permission of the author. Dr. Kelley's last contribution to *ETC.* was "The Teaching of Controversial Issues," which appeared in the June 1962 issue.

The Scientific Method

SINCE I propose to use the scientific method in the examination of individualism, a short discussion of this method may be in order. It is precisely at this point that I think other writers in this area have overlooked a possibility. Many people seem to think that the scientific method is something that goes on in laboratories, but does not apply to the ordinary problems of living. Thus, a high school student learns his scientific method in the chemistry and physics classes, and it has nothing to do with his social studies. If this sealing off really worked, it would defeat the purpose of the learning, since few of us spend our lives in laboratories. In fact, the laboratories of our schools may be the poorest places to learn the scientific method. Often learners are told to follow a manual, which is little different from a recipe book. As long as the manual is followed, the experiment turns out to be what the teachers expected.

The scientific method merely means that we look to nature—look to the thing or person—to see what it is like. Then we, having an end in mind, decide what to do to bring about this end. We proceed in the light of what we learn about the person or thing. The teacher, for example, wanting to bring about development and growth in the learner, looks to the learner, to see what he is like, before deciding how to bring this growth about. If he is scientific, he does not look at his textbook and ignore the learner, simply because it is the learner, not the textbook, which he wants to facilitate. The manufacturer, probably through his industrial designer or inventor, always looks to the thing to see what it is like before he decides what to use. He has a conception of what his outcome is to be, but he has to start by looking to nature for the characteristics he wants. If he did not do this, he would not be in business long.

But, one might ask, doesn't everybody do this? In some areas, we always do. The manufacturer's product has to function, or he will not be able to sell it. But in many areas—education, economics, politics—we pay little attention to what

the individual is like. And in our daily lives we resort to animism and superstition. Animism is making the inanimate animate. The older practice was to invest with devils the things which behaved in ways which did not suit human purposes. Many of us are convinced of the perversity of inanimate objects. We curse the window which will not open—we blame the hammer when we hit our thumb. A friend of mine, usually scientific, traded his car because he said it was accident-prone.

Galileo's experience with his contemporaries illustrates this point. In his scientific studies, he came to the conclusion that a heavy object and a light one, if dropped at the same time from a height, would reach the ground at the same time. His colleagues said this was obvious nonsense, that as Aristotle has said and as everyone with any sense could plainly see, the heavy object would reach the ground first. So Galileo took two balls of different weight and, in the presence of his colleagues, dropped them at the same time. They hit the floor at the same time. In other words he looked to nature—to the balls. His contemporaries then said that the balls were possessed of devils, and that Galileo must be a sorcerer. They animated the balls. They then threw Galileo in jail as a dangerous person. He did not like it there, so he recanted, and they let him out. But a scientific fact had been established, and this did not die. The balls did not recant.

In examining individualism, I propose not to start with economics, or with politics, or religion, but with the nature of the human organism, to see how it is built, and therefore how we may expect it to function. By this method, and I believe, by this method only, can we draw conclusions as to how we may best live together.

Each Person is Unique

THE MOST SIGNIFICANT, most important fact about any human being is the fact that each individual is unique. This means that each person has something, knows something, which nobody else on earth has or knows. It is, of course, not always easy to bring this special contribution out, but it is there if it can be made to function. This difference is

what the individual uses, when he makes his own special contribution to any enterprise. This is the way by which an individual achieves significance.

When Thomas Jefferson declared that it was self-evident that all men are created equal, he meant that they were equal politically, before the law, not biologically or psychologically. Little was then known about human biology. If Jefferson had been in possession of present-day research, and had spoken as a biologist, he might have said that "It is self-evident that all men are created unequal." But then as a statesman, he doubtless would have added that "In spite of this fact, all are obviously equal before the law, and are entitled to equal justice."

That all people are different is a fact which everybody accepts in a superficial way. Anybody can see, just by looking at any group of people, that no two are alike. But the depth of this uniqueness is not generally comprehended, and this results in many people behaving as though people were alike. Indeed, in many of our human activities we seem to strive to make people alike. This goes on in all facets of our society—the home, the school, the church, the military.

Often it seems that in spite of superficial knowledge that all people are different, we try to repeal uniqueness, which nature has gone to so much trouble to establish. We seem to cherish likeness, and conformity. A good example of this is what goes on in our schools. I use this example not because the school is the only place in our society where striving for conformity goes on, but because it is well-known to most people. For centuries our teachers have striven to bring everyone through their courses knowing the same things. They have frowned upon the learners who let their differences show. They have rewarded the conformers, and punished the ones who resisted conformity, "the trouble makers." One of the worst things a pupil can do is to let his uniqueness show. In other words, the learner must hide that which makes him an individual among others of his kind. Teachers have never yet brought a class through so that all knew the same things. In the light of what we know about how these individuals

are made, we can safely predict that they never will. Yet generation after generation, they keep trying, amazingly unshaken by their perpetual defeat.

But I should not criticize the teachers alone for the wholesale drive toward conformity. Conformity is cherished and uniqueness is frowned upon in industry, in labor unions, in business, in religion; in fact, it is difficult to find a facet of our society where individuality is cherished. I can think of two reasons for mentioning the schools in particular. The first is that any example needs to be as nearly universal in everyone's experience as possible. The second is that teachers are in a somewhat better position to know better than are most other people.

Nature Cherishes Uniqueness

I HAVE SAID that nature cherishes uniqueness, and it seems proper that I explain what I mean. I hope that no one will be blocked by my use of the word "nature." This is not the place to go into a discussion of original cause, nor do I consider such a discussion very profitable. I propose to cite some things that have happened, and I hope that if I credit "nature," it will leave an opening for the fundamentalists, the atheists, and all who are between these two extremes. These things did and do occur, and it helps me semantically to say that "nature" did them. They are quite remarkable.

Wherever we look in the world of nature we cannot help being impressed with the fact that nature must abhor likeness. Of all the leaves on all the trees, no two can be found that are exactly alike. Of the billions of blades of grass in the world, it is impossible (or practically so at any rate) to find two that are alike. There are no two scenes which are the same. The straight line, so common in our man-made world, is never found in the natural world.

But these evidences are superficial. They are not really "proof." When we now consider how all higher organisms are made, we will be able to see how uniqueness has been established, and how complicated and difficult this was to bring about.

Since we are concerned with individualism, we are interested in consideration of how *man* is made, not higher plants and animals. In discussing this problem, I shall take up first the physical man or self, and then the psychological self. These two are not a duality. They operate as one, and neither can be well or sick without this being reflected in the other. But they are differently made, and for that reason one has to be described before the other. This is a problem in language, since we have to put one word after another in a linear way, while what we want to describe is usually not linear. This being the case, I shall first describe how the physical self is made and what it feeds on. Then I shall consider the psychological self, how it is made, how it grows, what it feeds on. We can then see how they fit together, pervade the same area, and thus create the individual, making individualism possible.

How Uniqueness Is Assured in the Physical Body

IT IS GENERALLY ACCEPTED now, at least by scientists, that life on earth began in the form of single cells in water, and that present life in all its many forms developed from these cells. We still have single-celled plants and animals today, but they lead a very limited existence. They absorb food and grow in size until they become cumbersome, and then they simply divide, forming two small cells where there had been one large one. Then these two new cells start to grow, and in time repeat the process. The biologists call the two new cells "daughter cells," although I don't know why, since sex had not yet been invented. This may be one reason why they lead a dull and limited existence. They do not have a "parent problem," since each cell is like the other, and neither can be called the parent of the other.

As long as individual cells continued to reproduce by dividing, it was not possible for them to make any progress. I might suggest that this was true because each cell had to do everything for itself—getting food, digesting, keeping vigil, eliminating, and hence none of these functions could be done very well. And the possibilities presented by the reproductive

process which was available (simple division) offered no chance for improving the quality of the breed. I use the word progress here merely in the sense of becoming more complicated, and hence more able to do many different kinds of things. I do not wish to argue the point that we may be worse off now, with the hydrogen bomb hanging over our heads, than we were when life started. We are vastly more complicated and able to introduce novelty into our existence.

The first move in the direction of multi-cellular organisms seems to have come when some of the daughter-cells began to cling together, thus making clumps of undifferentiated cells. This may have been due to incomplete fission (they just stuck together) or it may have been the original "togetherness." Those who consider this last notion to be absurd might read *Cell and Psyche—The Biology of Purpose*, by Edmund Sinnott (Chapel Hill, North Carolina, 1950), particularly pages 26-42.

There was not much advantage in "togetherness" as long as each cell had to do everything for itself. Probably the cells in the center of the clump were actually worse off than they had been before, since food and water must have been less available than they were when each cell floated in the water. At any rate, the cells of the clump began to specialize, so that some cells did all of the digesting, others did all of the alerting, and so on. When cells began to perform special functions for the whole, that was the beginning of organism. By definition, an independent cell, or a cluster of them, cannot be an organism. It is when parts of the cluster perform special services for the whole that an organism can be said to exist. So when cells in clusters began special services, organisms first came into being and life was on its way to a multitude of complications.

But it was not far on its way. There was as yet no way for very much change to be introduced. The cells still reproduced by simple division. A new organism was started by a piece of the old one breaking off, and starting an independent existence. Perhaps that is where the notion of "a chip off the old block" began. For that was what all young ones were, and they had no choice except to grow into a "reasonable

facsimile" of the old block. Some of these plants grew to great size.

After millions of years of this limited existence, a remarkable development took place. Whereas for eons, the only way to reproduce was division (making two from one) a scheme developed whereby it was possible to make one from two. As long as two were simply parts of the parent, the young could not be any different from the old. But when a way was found to make one from two, the young then being part of two individuals, could not be exactly like either one of them. The young *had* to be somewhat different from either parent; indeed, it had to be different from any other organism anywhere. This was how uniqueness, so essential to the development of complicated forms of life, especially human life, was brought about. Biologists call this process heterosexual reproduction. Here, in the very early stages of plant and animal life, was the dawn of sex. This phenomenon can be observed under the microscope in biological laboratories by anyone who cares to see it. I first saw it in a slide showing spirogyra, or pond scum. To see this is to make it clear that this process was hard to come by. Here began the groundwork for the "agony and the ecstasy." Since uniqueness, in the physical sense, had been provided for, there was then no end to the possibilities for complications, for progress. We see life now in its myriad forms, all around us. The crowning achievement is man.

I HAVE MENTIONED that in the very beginning of organisms, there had to be cell specialization. This does not seem to be the proper place to describe in detail what happens to the reproductive cells as they have developed for making one out of two instead of two out of one. I might say that the process of cell formation has to be just the opposite from ordinary division, so that when two cells join, one from each parent, the supply of chromosomes (trait carriers) will be back to normal, and not double that number. Anyone who wishes to understand this process better can find a full expla-

nation, with illustrations, in almost any biology textbook. I want to point out merely that the reproductive cells in each organism are so highly specialized that they even divide differently from the others. In a real sense, they are immortal, because they constitute the link between one generation and the next. All of the other cells, which constitute by volume almost the entire organism, are mortal, and carry no bridge to the next generation.

It is in the formation of the reproductive cells (sperm cells in the male, egg cells in the female) that physical uniqueness is guaranteed. This device is such that it is practically impossible, mathematically, for any two organisms to have the same cellular content. This is true in all cases except identical twins, which are rare. And they are alike only in their physical make-up, which is less than half of the story. Perhaps this is why humans almost always produce their young one at a time, rather than in litters. A litter of humans creates quite an uproar. Even in the case of litters, they are usually the product of separate fertilizations, only rarely from a single fusion of egg and sperm. Anyone who wishes to explore further the impossibility of individuals having the same cellular make-up might want to read *What is Life*, by Erwin Schroedinger (New York, 1945).

The reason for giving so much importance to the behavior of the sex cells in heterosexual reproduction is that the cell content of the new individual determines its physical characteristics. This is nature's "invention" to assure that no two individuals shall be exactly alike physically. Where there are differences there may be progress; hence the development of more complicated organisms became possible, and the development of man was made possible. When all offspring are unique, and each is different from its peers and from its parents, some of course will be inferior to the parents, but others will be a step in advance. Change, newness, becomes feasible.

It is still possible, even after millions of years of evolving, for heterosexual reproduction (and thus uniqueness) to be by-passed, and a piece of the parent may grow into an

individual like the parent. Regeneration of organs in lower animals, such as tadpoles, or starfish, is readily observed. When an earthworm is cut in two, the part with the head can grow a new tail and become a complete adult.

This process is much more common in plants than in animals. Gardeners purposely graft branches onto roots to avoid the outcomes of uniqueness. When an apple grower, for example, develops a tree which produces beautiful fruit, he knows that he cannot plant the seeds of this tree and hope that the next generation will be the same as the parent. So he may plant the seed to get a root onto which he can graft parts of the parent tree, but he does not take a chance on what this root may produce if left to itself. The new fruit might be better than the parent. But since the parent has been chosen from many, the chances are that it would be of poorer quality.

This grafting process, which is used in the production of many fruits and flowers, is reverting to the method of reproduction which prevailed before the invention of sex, and is done to *prevent* uniqueness, to shortcut the normal processes of reproduction because whatever the new plant may be like, it is bound to be different.

Of course grafting is not possible in higher animals or in man—their organisms are too complex. And so man's uniqueness, his most valuable possession, is guaranteed. After the fusion of the two sex cells, when the new organism is actually formed, it is fed by its mother on the materials it needs for physical growth. Later on it leaves the mother and learns to feed on all sorts of things. Its choice of what it feeds on is always selective, that is, it eats some things and rejects others, in a highly individualistic manner. The food for the material self is material—meat, potatoes, cabbages, onions—but always somewhat different for different people. Somewhere between sixteen and twenty-five years after its beginning, it stops growing, and uses food for maintenance only for the rest of its life. The mechanism for the stopping of growth is *built in*, and thus the body cannot continue to grow until it becomes cumbersome or grotesque. The wisdom

of the body asserts itself. This may not seem important to mention, but psychological growth, I shall show later, does not stop as physical growth does, and this is one of the important facts of life.

And so stands the physical man, uniquely equipped by the make-up of his genes, uniquely grown from what he has to grow on, and his selection of what he will use, and what he will reject.

How Nature Guarantees Uniqueness in the Psychological Self

I HAVE CONSIDERED it worth while to devote considerable space to the ways by which nature has provided for the individual physical self, so that no two shall be alike. The amazing story of development of a mechanism whereby one could be made from two, unlike either, instead of two being made from one, is something to contemplate. It is the crucial achievement in the development of complex organisms culminating in man.

But this, long as it may seem to be, is less than half of the story. A fine physical structure is a good thing to have, but with this alone a man would be only a fine animal. What is distinctly human about him depends upon the psychological self which has been developed in him. A man may be a demon or a saint, or perhaps just an animal, with the same physical body, even though nature has made that body unique. What makes a man distinctly human is not his body, although this unique body could not have been evolved without the "invention" of heterosexual reproduction, but his attitudes, habits, beliefs, prejudices. For these control his behavior, what he does with his unique body. These have to be taken into account when we consider individualism.

When we speak of the physical and psychological selves, we must not lose sight of the fact that these two are not separate. They come together at birth, fully integrated, and never become independent of each other. What happens to one also happens to the other. The oneness of the total human organism must not be overlooked. We deal with them sep-

arately because we cannot write of both at once, and because they are developed differently, they feed on different kinds of stuff; their uniqueness is guaranteed by two different processes.

When, at the age of nine months, the human infant is born, it is a remarkable organism. It has eyes to see, although it has experienced no light, a stomach to digest, though it has never needed one, and innumerable other provisions of foresight for the individual life to come. Most remarkable of all, perhaps, is that it comes equipped with a part of the brain called the cortex. This cortex is a layer of tissue covering the rest of the brain, an outer layer, as the name cortex implies. This outer layer is to become the facilitating, coordinating organ for the whole.¹ Almost everything that is distinctly human about a person finally resides in this cortex. It is the organ which other living creatures do not possess in sufficient quantity to achieve humanness. The lack of cortex is why horses and dogs, which are among our more intelligent lower animals, have to be trained, while a human can be educated.

This is not to imply that these animals do not have any cortical tissue at all. The beginnings of a cortex can be found in animals as low in the evolutionary scale as the amphibians and fishes. It is more pronounced in reptiles. Only in man, however, is it sufficiently developed so that language and other complicated abstract processes are possible.

The newborn babe thus comes equipped with a most remarkable instrument. Its possibilities are practically infinite. Neurologists estimate that even the most brilliant of men uses but a small part of his potential; and so there are no upper limits to human achievement. (Theoretically I suppose there are, but these limits are so far beyond the best of us that for practical purposes there are no limits.)

An important fact, however, is that this distinctly human organ at birth is *undeveloped*. It is a facilitating and coordinating instrument, and it is developed through life itself, for in life there are many facilitating and coordinating func-

¹ Those interested in a non-technical discussion of the cortex should see *The Evolution of Human Nature*, by C. Judson Herrick (Austin, Texas, 1956).

tions to perform. Without the cortex, language, with all of its complications, would be impossible. So the cortex is developed, not ready made, and its quality depends upon the quality of the life the individual is privileged or forced to live. In other words, the most distinctly human part of the whole human organism is built by experience. The quality of available experience becomes all-important.

The experiences available to any individual depend upon and are controlled by the process of perception. Perception is what comes into consciousness when outside stimuli impinge upon an organism. These stimuli are received by various organs and interpreted by the brain through the sorting and facilitating function of the cortex. Each time the cortex functions it is also built, so that it becomes what it has experienced.

It is only through the perceptive process that we know anything about what is in our environment; or, that we know anything at all. Perception is not essential to life, because many things, such as trees, live without perceiving. But they are forced to live most limited lives, often to be rooted in the earth, and at the mercy of the elements. When the elements are good to them, they may live for centuries. If the surroundings are hostile, however, they can do nothing about them but to die. Through perception, men and many of the lower animals can do something to order their environments so that hostile surroundings need not destroy them.

And so perception becomes the crucial phenomenon of human life. It is through this process that all learning takes place. The way this process develops the cortex determines the kind of person any newborn individual can become. The psychological self is built by its perceptions. And this self is what an individual becomes. It has been nearly one hundred years since the formal beginning of the laboratory study of psychology. In that time, not nearly enough attention has been paid to this phenomenon, when we consider that it is the gateway to all knowing and all learning. Some studies have been made, of course, but for the most part perception has been accepted as a "given"—taken for granted. It has been generally believed that the *object* in one's environment was

the basis for reality and that the human organism was merely a receiver, and had no choice except to "see things as they are." Being only a receiver reduced man to an unimportant role in the whole process of living. This concept of the status of the individual in the learning-knowing process led to all sorts of demeaning relationships between individuals. The teacher, for example, had only to tell the learner what he wanted the learner to know, and the learner had no choice but to receive it exactly as sent. And of course there was no chance for interpretation. Thus did authoritarianism, with all of its attendant evils, appear to be the logical way of life, especially to the dictator.

Recent research has shown that the receiver notion does not represent what actually happens when stimuli from the outside are received. It will not be possible here to go into detail concerning this research, but only to cite it and explain briefly how it controls the development of the psychological self and guarantees its uniqueness. This research was carried on by Adelbert Ames, Jr., and made possible through the efforts of John Pearson, both of Hanover, New Hampshire. It took place roughly between 1940 and 1955, when Professor Ames died. So it is relatively recent. It is not surprising that these new formulations in perception are not better when we consider how long it takes new knowledge to affect human behavior.

I WILL NOW attempt to state in a few words what the import of Professor Ames' work is, and how it provides the formerly missing block in the understanding of man's uniqueness.²

The crucial idea, so far as this paper is concerned, developed by Professor Ames in his laboratories is that our perceptions come from us, and not from our surroundings. This is the opposite notion of perception so long held by so many.

² See Hadley Cantril, *The Why of Man's Experience* (New York, 1950); *The Morning Notes of Adelbert Ames*, Hadley Cantril, ed. (New Brunswick, New Jersey, 1960); *Explorations in Transactional Psychology*, F. P. Kilpatrick, ed. (New York, 1961); Earl C. Kelley, *Education for What is Real* (New York, 1947).

The perceiver decides what a thing is, and where it is. Thus the *individual* becomes the all-important part of the process of perception, rather than the least important. This is not to deny the existence of matter, as some philosophers have done. The object—person or thing—in one's externality starts the process by giving off light or sound stimuli, but the perceiver makes what he can and must of it. No two people make exactly the same of anything; and what any perceiver makes of any person or thing is more or less at variance with the thing itself.

It can now be seen that commonly held notions of the perceptive process are exactly wrong; that the facts now revealed are just the opposite. The perceiver now becomes the crucial part of the transaction, rather than the sender of the stimuli. This fact, when generally held, will be a revolution in man's understanding of himself. It is revolutionary, not evolutionary, because perception takes place in the opposite direction from what has been generally believed.

What one makes of what he sees depends upon what he already is. He decides on the basis of his own past experience. He has to "name" things in the light of what he has named them before. His previous expectations and assumptions come into play. Since no two people can have the same experiential background, no two have the equipment through which to come to precisely the same conclusion. As the on-going process of receiving and interpreting goes on, the unique interpretations of the perceiver are built into the structure of the cortex, and the unique psychological self is built. We can see how this could not be if it were true that the human organism is only a receiver.

Here I shall briefly refer to the fact that experience is not enough to account for the selective nature of perception. We do not see everything in our surroundings, although we usually have had experience with each item present at any given time. There are thousands of coincidences in any given scene. But any one individual perceives only a few of them. If he took them all in, his world would be bedlam. So he selects, automatically, a small part of the items to which he will attend. In other words there must be some sort of automatic control

over what the psychological self can feed upon.

Since no two people observe the same things in any given scene, although both have had experience with everything in the scene, there must be another factor operating. Ames called this factor purpose, mostly unconscious purpose, because selective perception operates unconsciously and automatically most of the time. It seems that people are unique in this regard as in all others. We can now postulate that the pattern for unique purpose is laid down when the original cells of the individual are formed.

This seems to fit the rest of the pattern. A cell or an organism is an embodiment of energy seeking to spend itself. It is not too much to assume that any embodiment of energy has its own path down which it may best travel. This in part explains behavior in all living things; for it appears that all living tissue is purposive. This idea is appearing in the writings of biologists and those in related areas, although they do not always use the same names.³

There are those who are loath to accept this concept of purpose operating in perception because nobody has ever seen it. But of course nobody has ever seen a habit or an attitude except as it is reflected in behavior. Psychologists who resist this notion were raised on the "instinct" concept, which they readily accepted, but later abandoned. As a matter of fact, acceptance of things unseen in the physical world to account for behavior is most respectable. One might raise the question as to whether the electron was discovered or invented. It was of course invented in order to account for the behavior of matter.

The psychological self is built through the perceptive process. This is based on unique experiences and unique purpose, so that the psychological self is unique. The cortex, which in any considerable quantity is the special possession of the human organism, is developed by these perceptions. The

³ See *Cell and Psyche, The Biology of Purpose* by Sinnott for a somewhat different treatment of the same idea. Those interested in a more extended treatment of purpose see Earl C. Kelley and Marie I. Rasey, *Education and the Nature of Man*, Chapter VI (New York, 1952).

psychological self is completely integrated with the physical self. (I am tempted to say it "resides in" the physical self, but this suggests a duality and is a throw-back to outmoded ways of thinking.)

It has been known for a long time, in a superficial way, that no two people see the same things in similar circumstances. In law schools, I am told, it has long been a practice to stage an incident in the class and then ask the students to write what they saw. No two ever saw the same things, and so the law professors used this fact to show the lack of reliability in evidence given by eye-witnesses. The meaning of this for individualism apparently escaped them. This idea of an incident-and-witness account was used in the first psychology course I ever attended. But then the professor proceeded to teach the course just as though what he had shown through the incident technique was not so. These law and psychology professors were stumbling over one of the most important facts of human life without knowing it. But they have no corner on this. I learned about the behavior of sex cells, observed it in *spirogyra* with a microscope, before I was twenty-five years old, but the significance of this did not dawn on me for thirty years after that.

The Self Has Boundaries

IN ORDER to understand what the individual is, and what individualism means, we need to see that the psychological self has limits or boundaries, so that the individual can be contained and maintained. The skin is the boundary of the physical self, and this of course can be seen and readily accepted. But the psychological self has to "leave off" somewhere too, and it has to be protected just as the skin limits and protects tissue. The boundary to the psychological self seems necessary for it to maintain its integrity, its oneness. Nature has provided for it.

In the very beginning of an individual life, perception is somehow selective. This means that some of the possibilities from the outside are admitted—some excluded. Of course there is nothing physical here for us to see, but I am helped in my

thinking about it to imagine an invisible screen, through which some stimuli can enter and some cannot. This screen, this selective device, is essential to individuality, because without it the mass of perceptive material would be overwhelming.

In general, the screen admits that which the individual regards as facilitating, and excludes that which it holds to be endangering. There are many possibilities which are excluded or taken in that are not either facilitating or endangering, but the most significant classification is on this basis.

If I may carry the analogy of the screen a step farther, it is possible to see how, in a hostile environment, it becomes less open as the person sees himself in need of more protection. Hostile, endangering environments tend to thicken and harden the screen, while friendly and helpful surroundings tend to open it up. Thus an individual who sees himself as living in a hostile environment builds his defenses higher and thicker. Under these circumstances it comes about that the screen, or the boundary of the self becomes so impervious that little, in some cases nothing, can get in. We all know people who do not receive any ideas sent to them. Words seem to bounce off them. They have built their defenses so strong that they are actually inaccessible. In some cases, they are able to talk, and do so in volume, but what they say is unrelated to what anyone else has said. It is as though, while others talk, they are preparing what they are going to say. Others cannot seem to get through the boundary either way, and neither listen nor talk. People are then inclined to consider them dull, or boresome, when in fact they are only frightened. Or they have been frightened in the past and have built their defenses to an impractical degree, but no longer feel the fright that rendered them inaccessible.

The boundaries of the psychological self, necessary to the operation of the integrated self, then become barriers rather than boundaries. The self becomes a prisoner within his own wall, and he is thus cut off from communication with other people. This communication is necessary to provide the stuff of growth, and so such people render themselves unable to receive anything to grow on. The imprisoned self starves and

practically dies, although the physical structure may continue to live. It is not uncommon, however, for the physical self to become wearied of the untenable condition and also die.

Defenses are necessary, provided they do not become so impervious that they imprison that which they defend. It often happens that defenses are inadequate for the dangers of living. This happens most often to the very young, who have tender psychological selves and inadequate protection. In these cases, which are numerous, the self becomes damaged, and in serious cases crippled. These psychological cripples have to behave as cripples do, and their actions are at wide variance with what is "expected" of them in our culture. From this group society gets its criminals, its deviates, its so-called insane. The person is crippled by conditions over which he has little control, and then because he behaves in a crippled fashion we say he is delinquent or "insane."

This is not because we are inhuman, or devoid of human compassion. It is because we cannot see the psychological self. Our hearts go out to the physical cripple, and great deference is properly paid to him. If we could see the psychological cripple our blame, hostility, and rejection would be changed to love and tender nurture. We would not expect him to step lively, and look out for himself. We would cease to subject him to the many forms of rejection which we have devised for those who do not conform.

And so the human individual is built. He has a body like no other. It is a remarkable creation, having built into it many automatic, self-regulating devices. It has enormous recuperative powers, and will stand unconscionable abuse, showing the enormous will to live which we observe in all living things. It feeds on physical things, although these are selectively chosen by each individual and are not the same for any two persons except where there is only one thing to be had. He has a unique psychological self which controls his behavior. This is built out of the perceptive stuff of growth, also selected in keeping with his unique experience and purpose. The food of this self consists of whatever there is around him to select from—squalor, rejection, hostility, love,

beauty, sunsets, symphonies. All of these things, physical and perceptual, are what the individual is, and provide the basis for our consideration of individuality.

What, Then, About Individualism?

EVERYTHING in this paper, up to this point, is, I believe, firmly founded on scientific research. It is based on two enormous pieces of laboratory research. The first part depends upon what the biologists and cytologists have learned about how one body is made out of two, with contributions from both, providing unique physical structures. The second part makes use of what Ames and his associates have discovered about the perceptive process and how it provides for construction of the unique psychological self.

Now I propose to argue beyond the data into meaning. This is admittedly what I see as meaning. It is conceivable that someone else might see something different. We would then be in the hands of the reader, who would have to judge what meanings seemed most logically arrived at. He is always the final arbiter anyway, since he makes what he can out of what he reads, and what is communicated is what he makes of it, not what I think I am communicating.

There is some misunderstanding in some quarters about what scientific data are really for. I have been accused, by critics of some of my previous writings, of "arguing beyond data." This is quite true, but I would like to say that that is precisely what data are good for, and that data have no value by themselves. They only become useful when someone says "What does this mean?" Everybody does this, whether he intends to or not. "Pure" scientists stoutly claim that they uncover the facts, and what the implications of these facts are is none of their business. I doubt that this really happens. How can anyone stop at this point? How, indeed, would the "pure" scientist even be able to tell what data to keep and what to discard? If he decides what to keep, he must make choices in the light of some significance, and by that very act he tampers with his own purity.

Arguing from data to meaning may be said to be the

task of the philosopher. A professional philosopher should certainly be aware of what research has to say, as a starting point for discussions. The great risk is not that the philosopher may argue beyond the data, but that he may argue without data, or in disregard of it. Without the basis of some understanding of what research has produced, the philosopher risks slipping into mere babbling.

Since it seems impossible even to select data without some reference to meaning, all scientists become philosophers in some degree. All of the rest of us who learn about data and hold them to be significant become philosophers. And thus the findings of the research workers come into significance in human affairs. It would be pretentious, of course, for all of us who consciously or unconsciously argue meaning from data to class ourselves with the professional philosophers. They are most often historical philosophers. They usually teach as a means of livelihood, and they spend most of their time teaching us what the philosophers who have gone before have postulated. Their scope is mainly from Socrates to Dewey. Since the great men of the past have contributed much, these historical philosophers serve a most important function. We should, however, learn to call their contribution by its right name.

All of this is by way of explaining that I am now going beyond the data to say what I think the cited research means for individualism. Nature's great effort has been to produce uniqueness in all living things of any considerable complexity. The significance of this fact seems to stand out, and to be focal. What does this mean for living together in the compact society in which we now find ourselves?

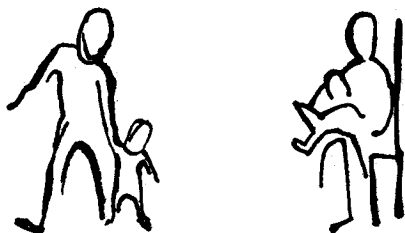
Man Is a Social Being

THE FACT that man is a social being can be deduced, first of all, from the way in which the cortex of the brain is developed. The cortex is doubtless the only organ which is distinctly human. In all other ways that I can think of, some animals excel us. Some can run faster, some are stronger, some have better eyesight or hearing, and so on. But none has a sizeable cortex, which, when developed, makes possible all of

the characteristics which are distinctly human, such as complex language and esthetics.

This organ has to be developed in social relations with other people. No human ever acquired the distinctive human characteristics without other people. They are a basic requirement for the development of human qualities.

Perhaps this is the meaning of the fact that the human infant is born quite completely helpless, utterly dependent on others, and remains so for considerable time. I know of no other species where this is so true as in the human species. This means that each individual in order to survive is provided with another human being for both physical and psychological nurture. Usually this other person is the mother, but if anything happens to the mother, someone else has to be provided, or the individual dies. Nature seems also to have provided for mother love, which in some cases baffles all human understanding. Maybe this cortical need is why the human young are usually born singly, rather than in litters or clutches. This might be an attempt to force adult attention on the individual.



The implications of this social requirement are many. We can see from this that the quality of the individual depends largely on the quality of the adults he has to develop from. This is not a completely limiting factor, because, once started, the individual may seek other and more promising people for his psychological feeding. But in general, we build and are built by the people around us; and in general, allowing for individual differences, dullness (or brightness) is more on the order of an achievement, rather than a gift.

The Individual is Dependent

WHEN WE SEE that the psychological self is built mostly out of the people around it, we see that the day never comes when the individual can continue to thrive without other people. Growth of self is continuous throughout life, and social contact with other people makes this growth possible. One goes from the complete helplessness of infancy to the competence of adulthood, but he never gets to the point where his self no longer needs to be fed.

There are of course a few instances where individuals isolate themselves from human contacts, but it can be seen that they no longer continue to grow, or, if we can call it growth, they grow in grotesque ways. Very few people achieve complete isolation, even though they try to. For most people, the hunger for others is almost overwhelming. That is why, in our prisons, solitary confinement is the most severe of all punishments, and is used only in especially difficult cases.

It is perhaps more proper to say not that adults are dependent, but that they are interdependent. They must receive from others and cannot thrive without doing so, but they also give. It is an interchange, or a sort of transaction.

We can see that the "self-made" man is myth. If an individual were really self-made, he never would have got past infancy, except perhaps in a physical sense. There are some infants who withdraw into themselves and never grow and never communicate. They evidently look out upon what appears to them to be a hostile world and draw back within their shells. They are called "autistic" babies. The self-made man would be like this except for other people. We do have some rugged individualists in that they behave in a rugged manner toward most other people, but they have to have other people, though they may only exploit them.

When the rugged individualist, the self-made man, beats his chest and admires his handiwork, little does he know what he would look like if this were really true.

There is always the hazard of having too many people. The individual has to have contact with others, but he also has to have some time by himself, so that he can sort out

significances, to derive meaning out of experience through reflection. The meaning derived by the reconstruction of experience is unique to the individual deriving it, and it is therefore individualistic.

It is possible, indeed in these times it often happens, that the individual has so many other people around him, and so little time for reconstruction that there is no chance for any meaning to be derived. This happens where too many people live in the same quarters. It is also true, I believe, in our large schools, where there are too many others to cope with. A large school with four thousand people on the same city block can be the loneliest place in the world. One can observe students attempting to assuage this loneliness by the formation of clubs, cliques, and other small groups to which they may belong. There are however literally hundreds of young people in these schools who do not know how to form these connections, and who are starved for want of human contacts at the very time that they have the most people around them—starving amid plenty.

There is a tendency on the part of some individuals to seek mass situations because they want to escape or withdraw. Reisman has described these people so well in *The Lonely Crowd*. But this is not the normal quest of the healthy individual. It is a withdrawal into anonymity. It is another way of avoiding being a part of what the individual views as a hostile world.

Is the Individual a Conformist?

THE INDIVIDUAL is a conformist part of the time, and in certain situations. In this regard, he has two needs which would be in conflict if he had to satisfy both of them at the same time. These two needs are first, other people, and second, a chance to be himself. Most people do conform most of the time to the customs of the society in which they live. They do this because they want other people to like them and accept them, so that their psychological selves will have something to feed on.

For example, this afternoon I will go from my home

to the university to meet students and to teach a class. I will wear a suit, shirt, and tie. These are not the best garb, it seems to me, that could have been invented. But I will wear them because most of my male colleagues and students will be dressed somewhat similarly. Why do I do this when what I wear at home while writing is more comfortable? I do it because I want the acceptance, the love of my colleagues and students. I do not want them to think I am queer, because it is hard enough to break down the barriers between me and my students without that. In short, I conform to the extent of dressing somewhat like others because I want them to like me well enough so that there can be communication between us, and my self can be fed. I do not, however, have to dress this way all of the time. At home I can disregard some of these customs and so I take care of these needs in turn, not both at once.

Now it makes all of the difference in the world whether I conform out of my need for others or whether somebody "conforms" me. There is enormous pressure in today's society to make people conform. There is nothing new about this; as far back in human history as we can go there has been effort on the part of those in authority to make everybody alike to suit the authoritarian's purposes. The schools have never given up the idea that they can make people come out all the same. The examples of this effort are many, and run throughout our culture. It is as though they would repeal uniqueness, which nature has gone to so much trouble to establish.

In our schools they have tried ever since they took in different kinds of people to group them so that within any one group they will be all alike, or as nearly so as possible. Part of the rationale for this is that people group themselves anyway, and one can find the bright seeking each other out, and the dumb also seeking their own kind. Whether this happens or not is debatable, but one fact that seems certain is that it is one thing for them to group themselves and quite another to have somebody group them.

To pick up my illustration about dress, it is one thing for me to wear a necktie this afternoon because I think it will

make my colleagues and students like me and accept me, and another for the dean or president to decree that no professor would be allowed on campus without a necktie.

The normal individual is a conformist in the degree that he has to be in order to provide for his social need. He is nonconforming in that he is unique, and his uniqueness shows itself in the appropriate situations. I do not include among the "normal" those who use the crowd as a means of withdrawal into anonymity.

The Individual Is a Specialist

BECAUSE the individual is unique, there are some things that he can do better than other things. And he can do these better than other people who are unique in other ways. These special abilities fit together with the specialties of other people, so that no one has to be both a watch-maker and a banker, for example. Occupational satisfaction comes best when the individual finds the specialization which he can do best for the whole society. Society thrives best when individuals can be found in it who can best furnish the special services required for it to thrive. I am fortunate that I do not have to make my own watch or my shoes. The shoe-maker is fortunate that he does not have to write. The capacity to do some things better than others is laid down when the individual is conceived, and is further built by the life he lives after birth.

The Individual Must Be Cooperative

MOST OF US are willing to accept the notion of specialization even without the biological and psychological reasons for it. We are not all so willing to accept the idea that we are cooperative. There is a notion too generally held



that cooperation is un-American, and that democracy and cooperation are incompatible.

The opposite of this idea is perhaps the one that I am most anxious to set forth in this paper, because it seems to me that the notion that democracy and cooperation are incompatible is one of the most harmful ones abroad in our land. I have often heard that one cannot be a member of a group without surrendering his individuality. I remember the time that I was director of a workshop of lay citizens. After the workshop was over, one of the citizens said that I must be a communist because I had them working in small groups, and that these groups sat in circles, which suggested one world, and in the idea of one world was communistic. This is fantastic enough to have an element of humor in it, but the idea that one cannot work in a group without losing his individuality is not humorous. It is too damaging to be thought funny.

Many people like competition, as long as they are ahead. But in spite of these notions, this is the most highly specialized and the most cooperative society in the history of mankind. Without the cooperation of many people, our homes would become virtually uninhabitable in a very short time.

The only final good that comes out of working with other people, in a group, for example, comes to the various individuals in it. The group is not an entity. It is ephemeral, an abstraction. It disappears when the meeting is over, and though it may re-form at a later date, it is often different even in personnel. The benefits of the group operation, and they are many, are to the individuals, because they are permanent throughout the lives of the participants.

Freedom and Individualism

FREEDOM is a requirement of individualism. By this statement, I mean to say that freedom is not just something good to have, similar to having a new automobile or a fine house. It is essential to the development of a unique personality. No one can become what he might have been without freedom.

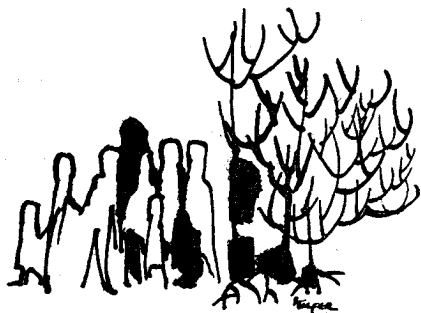
While this is not a new idea, we can now understand the basis for it better than was formerly possible. The demand for freedom is not, so far as we know, inherited in the sense of being carried in the genes. But it is inherent in the situation in which the individual finds himself. It seems clear, in the light of what we know about the oneness of matter and energy, that the human organism is an embodiment of energy. Energy seeks to spend itself, and since the individual is unique, there are unique paths down which this energy may be spent. We have called this the purposive nature of the individual. But purpose, of a path down which energy may be spent, has no meaning in the absence of freedom. That is, if someone or something is preventing the individual from doing what seems to fit his special needs, then it does no good to be purposive. Purpose, paths of energy, have no meaning in the absence of freedom. Or, as Plato is alleged to have said, a slave is one who gets his purpose from someone else.

These ideas add, in some degree, to our understanding of human history. The demand for freedom and democracy did not originate in the American colonies. Nor was it new at the time of Runnymede. It goes back as far as we have records. In considerable degree, the whole history of mankind has been a struggle between those who would oppress and those who would be free. Those who would be free have found many ways to break their chains. In the long run, freedom always triumphed. Of course the run has not been long enough for some individuals, and they have perished. Some individuals have accepted their roles as slaves. Tyranny, however, never has and, I think, never will succeed eventually. The reason for this is simply that oppression is against the nature of the human organism, and this nature will always assert itself. I must however mention here that a new factor has been added which might alter everything. We have learned now, for the first time, how to destroy all living things on the earth, and of course if this happens it will end this story along with all others.

In stating the individual's requirement for freedom, I do

not mean to imply that one is free to do just as he pleases. Nobody has that freedom, or can have it, unless he is willing to go into the wilderness and live entirely on its resources. The moment that anyone joins with one other person, he loses some of his right to do just as he pleases. He has to take the other into account. When we live with many other people, as everyone does in our close-knit society, the freedom to do just as one pleases is gone.

It is likely that when we give up a low-order of freedom, we achieve a freedom of a higher order. For example, I am not allowed to leave the street in front of my house unpaved, although I have to pay for the paving. No matter how rugged, how self-made I am, I have to pay. But so does everyone else, and so when I drive down the street it is all paved and I don't have to drive through muddy chuck holes left so by other rugged individuals. Also, I am not allowed to drive



through a red traffic light, but by surrendering this right, I have a fair degree of safety in urban driving. Freedom within the social scene is the only kind of freedom that is available to us if we are to meet another requirement, to have other people. If a person insists on exercising low-order freedoms which violate the rights and requirements of others, they will isolate him, and thus deprive him of the stuff out of which his psychological self is built.

If freedom is a requirement for the development and maintenance of individualism, what kind of freedom can we

have in the close-knit social scene within which most of us live? We must have the chance to make choices in as many areas as possible. We must have a chance to learn how to make choices by making them. Freedom is achieved by learning to exercise it, and this cannot be done in a situation of tyranny.

In this country, we have, in our every-day lives, some opportunities to make choices. I am free to live in this house or move. I can go on a trip, or stay home. There are many such freedoms. Even the man who has to tighten the same nut on an assembly line has part of his day when he can make choices. The more choices that are available to the individual the better.

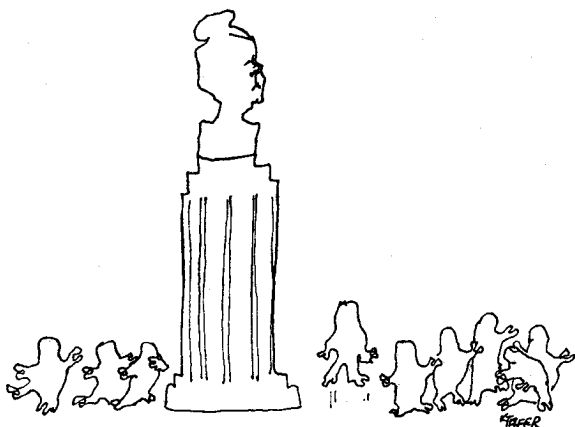
THERE ARE MANY in our society who lust for power over others, and many who fear freedom. These constitute the conscious and unconscious enemies of freedom. They are the enemies of individualism, because individualism requires freedom.

Those who fear freedom form the larger group. These are found in the home, the church, and most particularly in the schools. Many school teachers and administrators are afraid to take a chance on consulting their young students, for fear that they will not come up with the right answers. They fear that unless they sit tight on the lid which contains explosive human energy in great quantity the whole institution of the school will blow up. They fear that nobody will do anything of any value unless they force them to.

I probably dwell on this because I am myself a teacher, and the problems of the school are close to me. The schools, however, are most important if we are to have freedom. They affect the lives of almost everyone who lives in our country. The basic objection which I have concerning our schools is that they do not provide for choices required by free people. The young person of course can do his lessons or not, but this is not a genuine choice, because it is a choice between something or nothing. He cannot explore or initiate, but only follow orders. This produces a society composed of people

who are unaccustomed to and unskilled in making choices.

The people of such a society are quite easy prey for the demagogues who would deny freedom to others because they want power to oppress. That, I think, is why we are always living under the threat of some "ism." After World War II we had the threat of communism, which sought to do away with individualism and make everybody belong to the state rather than to himself. The American communists thought that,



since they were on the ground floor, they would inherit power when our government was overthrown. This was probably a vain hope, and they would likely have been shot as many other communists have been, but I believe they were motivated mainly by their own lust for power.

Then we had McCarthyism, guilt by association, the ruining of careers of innocent men and women, slander of some of our great democratic leaders, character assassination, and all the rest.

Now we are threatened by another "ism" which could hardly have grown to its present strength in a critical, democracy-loving society. This is John Birchism, coupled with militarism. John Birchism probably would not achieve a great deal of power by itself, but it has invaded the military at

least in some degree, and this combination has a potential power much greater than McCarthy ever had. Military coups are common in human history, all the way back to the ancient kings. They are perhaps the most recurring of all historical events.

These people are being called the "lunatic fringe." This is a dangerous mistake. They are a sizeable part of the American people, uneducated in the ways of freedom and democracy, unaware of the blessings of liberty. As long as we dismiss them as "crackpots" or "lunatic fringe" we imply that they never can amount to much. We might sleep past the point of no return. The people who are easy prey to such "isms" are an indictment against our educational systems, because they have not learned to understand democracy or to appreciate freedom. They are conscious or unconscious enemies of individuality.

We stand before the world as apostles of freedom. We advertise ourselves as the free world. Since freedom is a requirement for the development of individualism, and individualism can thrive only in a democracy, let us insist that freedom be extended to all.

Creativeness is a Characteristic of Individualism

ALL FREE PEOPLE are creative. This is true because being creative is inherent in the situation, as is the requirement for freedom. The reasoning is as follows: The human organism has a cortex, which distinguishes it from lower organisms. The cortex enables the individual to develop intelligence. Any intelligent creature will do what it can to improve its environment, just to make itself more comfortable, if nothing else. The human being is therefore always in a situation where he needs to contrive in order to modify his environment. He needs to contrive, and he has what it takes to contrive. Man has indeed done much to control the environment under which he lives.

This calls for an explanation of the term "creativity." Too often we are prone to think of it as a work of art, such as painting a picture or composing a symphony. These are

indeed creative acts, but they are a small part of the creation that is going on all around us. A person is creative whenever he finds himself in a situation which is a dilemma to him, and he invents a new answer to the dilemma. What is invented may not be new to all the world, but it is new to the inventor. It may be entirely new, adding to the store of human knowledge, but usually it is a present answer to an individual problem. We can see then how common creativity is in the lives of people.

In order for an individual to be creative he must have at least some degree of freedom. He has to be in a position to make choices, or else he cannot bring about new solutions. It therefore seems to be a fact that freedom and creativity come together. Freedom begets creativity. And creativity is the growing edge of life, the point at which all improvement or progress, all novelty comes into being. Free people create. The millions of slaves who have lived and died have left little to posterity.

Some think of creation as something which took place in the dim past, and has been finished for a long time. When we see the becoming, ongoing nature of life and the universe, we can understand that creation has never been finished, that it never will be. It is now going on, and every free individual is a part of it.

Conclusion

WHEN we take another look at individualism from the point of view of man's biological and psychological nature we see that what he has which makes him a person separate from all other persons is the ways in which he is unique. I am I, and you are you. We cannot change places. I have to go along with me for the rest of my days, and when my time is up, I as an individual will be through. I therefore have to cling to my individuality. It is what I have, by which I may be fulfilled.

There are threats to individualism, some of which have been mentioned. There are those who would enslave, and against these free men must be alert. Under enslavement, it

is possible so to control one's perceptions that he becomes what the tyrant wants him to be. We call this conditioning, but it is only possible in great degree among captives. A captive can come to love his chains, and surrender his individuality. We have the threat of the machine, or institutionalization, of "policy." The very nature of industrial society, with its canned entertainment, canned food has a strong tendency to feed us all the same fare, making us all alike. If it were possible to make us all alike, individualism would be gone.

There are some things, however, that authoritarians, with their coercive institutions and their attempts to bring standardization, have not been able to do. They will not be able to do this, as long as people retain a modicum of freedom. The schools, for example, have tried since the beginning of formal education to produce people who all knew the same things and had the same ignorances. They have never succeeded in this, even though they are still trying. The reason that it has not been possible to standardize everybody is that people have uniqueness built in from the very moment of conception. This *is* individualism. Powerful built-in forces thus thwart the authoritarian, the molding institutions, even the machine itself. Without the powerful force of the basic nature of the human organism, I think Orwell's *1984* would have arrived ahead of schedule. I think it will never arrive if we maintain an atmosphere of freedom.

And this is good news. Since human beings are constituted as they are, individualism will not perish from the earth. As John Dewey is reported to have said at the close of a long and complicated lecture, "I think I understand this better now."