

THE MEANING OF KNOWING

THE exposure of group or caste egotism occurs in great historical cycles, and often the mass reaction to the presumptions of an arrogant class, once they become widely known, produces effects which are equally undesirable. One cycle of exposure began with the discoveries of Copernicus, Galileo, and Newton, which in time had the effect of totally discrediting theological explanations of cosmology. Darwin came later, discrediting theological anthropology, and the work of Freud had a similar effect on Christian conceptions of "morality," an area of human life which is still in great confusion.

The "heroes" of the revolt against religious tyranny were scientists, who became dramatically effective critics of the authorities they were displacing as the leaders and shapers of culture. Their triumph was accomplished in the nineteenth century, consolidated early in the twentieth, and today we are in the midst of another great change, which is partly a reaction against the misuse of science and often characterized by angry emotion. Writing as an advocate of reform in science *from within*, A. H. Maslow spoke of this in one of his last papers ("Toward a Humanistic Biology"):

There are already data (Mead & Metraux 1957) which indicate that, for instance, high school girls think of scientists as monsters and horrors, and are afraid of them. They do not think of them as good potential husbands, for instance. I must express my own opinion that this is not merely a consequence of Hollywood "Mad Scientist" movies; there is something real and justified in this picture, even if it is terribly exaggerated. The fact is the man who controls, the man who is in charge, the man who does things to people, to animals, or to things is the master of what he surveys. This picture is even more clear in surveys of the "image of the physician." He is generally seen at the semiconscious or unconscious level as a master, a controller, a cutter, a dealer out of pain, etc. He is definitely the boss, the authority, the expert, the one who takes charge and tells people what to do. I think this "image" is now worst of all

for psychologists; college students now consider them to be, very frequently, manipulators, liars, concealers, and controllers.

When the rejection of a once authoritative group has these emotional overtones, there is little hope for a merely *corrective* response in the mass reaction that finally becomes inevitable. It would have been far better for the scientists themselves if they had not become the cocksure victors in their long struggle with religious bigotry and superstition, since this led to proud assumption and an air of confident certainty (not shared by a distinguished minority) that generates the response described by Maslow and others. An early analysis of the popular state of mind which preceded the present "anti-scientific" mood occurs in Ortega's *Revolt of the Masses*. Writing in 1930, he said:

While evidently all the other constituents of culture—politics, art, social standards, morality itself—have become problematic, there is one which increasingly demonstrates, in a manner most indisputable and most suitable to impress the mass-man, its marvelous efficiency: and that one is empirical science. Every day furnishes a new invention which this average man utilizes. Every day produces a new anesthetic or vaccine from which this average man benefits. Everyone knows that, if scientific inspiration does not weaken and the laboratories are multiplied three or ten times, there will be an automatic multiplication of wealth, comfort, health, prosperity. . . .

Who is it that exercises social power today? Who imposes the forms of his own mind on the period? Without a doubt, the man of the middle class. Which group, within that middle class, is considered the superior, the aristocracy of the present? Without a doubt, the technician: engineer, doctor, financier, teacher, and so on. Who, inside the group of technicians, represents it at its best and purest? Again, without a doubt, the man of science. If an astral personage were to visit Europe today and, for the purpose of forming judgment on it, inquire as to the type of man by which it would prefer to be

judged, there is no doubt that Europe would point to her men of science. Of course, our astral personage would not inquire for exceptional individuals, but would seek the generic type of "man of science," the high-point of European humanity.

And now it turns out that the actual scientific man is the prototype of the mass-man. Not by chance, not through the individual failings of each particular man of science, but because science itself—the root of our civilization—automatically converts him into a mass-man, makes of him a primitive, a modern barbarian.

This, broadly speaking, is the conclusion reached by Victor Ferkiss in *Technological Man: The Myth and the Reality* (Braziller, 1969), a book published nearly forty years after Ortega's study. Yet the serious offense of scientific authority is surely not the boons and conveniences and power it has bestowed on modern man, nor even its failure to make everyone "happy," but rather the self-image it has helped him to develop—he thinks of himself as *defined* by these benefits. This effect, continually reinforced by plaudits to science and by the formidable persuasions of modern advertising, has the fatal defect of making men believe they are dependent on outside conditions. So it is that, today, as the benefits diminish, and as ecological disasters multiply, "scientific progress" loses its savor and the condemnation of technology becomes an emotional epidemic. Little can be done, as was said, about such mass historical reactions, once human fears and passions are aroused, and especially when the provocations continue on so large a scale. All that individuals are capable of, in such junctures, is to recognize what is happening and to begin acting, as well as they can, in ways which will prevent the situation from becoming worse. So Paul Goodman, who is one of the most constructive critics of science and technology, proposes that technology become *modest*, that it stop claiming to know everything and to have the solution for all problems.

The self-reform of technological specialists is doubtless desirable, and the point of Goodman's latest book, *New Reformation*, is that it has

already begun. But the lesson of history is that *any* group, once it achieves power, tends to weaken itself with egotism and finally is overthrown and humiliated by an angry populace. This happened to the princes of the church, it happened to kings and emperors, and it now seems likely to happen to industrialists and parliaments, because of the promises they have made but have not been able to keep. From the historical record, it seems clear that the irremediable mistakes of rulers, whether individuals or groups, always result from their claim to be "right," and the pretense that they "know," which cannot be supported and is eventually exposed as false. And this seems always to lead to a new "righteousness" on the part of revolutionists and reformers, so that the same cycle begins all over again.

It follows, then, that while the exposure of the presumptions of the technologists is necessary, this rabble-rousing task is really no solution for the long-term and continuing problems of mankind. It is much more important to find out what it really means, for *all of us*, to be "right," and also what it means really to "know."

This is the Socratic inquiry, an investigation of both virtue and knowledge. It means an inquiry into first principles, into the root-ideas on which our action-deciding convictions are based. Since so many of the actions of modern man lead to disaster, there is at least reason to think that they are often based on ignorance instead of knowledge, and this alone is enough to justify a fundamental instead of a merely "problem-solving" sort of investigation.

What then do we know about "knowing"? If we go to the seminal thinkers of the present on this question, we are bound to encounter the ideas of Jean Piaget. What does he have to say? His answer to this question has a Deweyan ring. Children, adults, all people, learn from *action* in relation to what is to be known. Hearing something is not the same as doing it. There is uniform testimony on this point from everyone

who has worked on the problem. Descriptive knowledge is not enough. There is a sense in which all knowledge involves an identification by the knower with what he knows. The verbalizations of other knowers about what they know does not convey knowledge, but only a kind of "ghost" of what they know. Piaget's experiments showed this over and over again. Knowledge is something that has become a part of yourself. Piaget's experiments seem to have been mainly concerned with learning "thing" knowledge and mathematics, which involve different kinds of identification, but in both cases the learner must have his own experience of the realities that are to be grasped. He has to reinvent for himself the discoveries of other men, or he cannot really know them. His actual knowledge is only knowledge to which he can claim *independent* possession.

This applies both to things and to theory. What about knowledge of living creatures, or intelligent life? Maslow's paper, quoted earlier has an interesting passage on this question:

My work with monkeys, I am sure, is more "true," more "accurate," in a certain sense, more *objectively* true than it would have been if I had disliked monkeys. The fact was that I was fascinated with them. I became fond of my individual monkeys in a way that was not possible with my rats. I believe that the kind of work reported by Lorenz, Tinbergen, Gooddall, and Schaller is as good as it is, as instructive, illuminating, true, because these investigators "loved" the animals they were investigating. At the very least this kind of love produces interest and even fascination, and therefore great patience with long hours of observation. The mother, fascinated with her baby, who examines every square inch of it again and again with the greatest absorption, is certainly going to know more about her baby in the most literal sense than someone who is not interested in that particular baby. Something of the sort, I have found, is true between sweethearts. They are so fascinated with each other that examining, looking, listening, and exploring becomes itself a fascinating activity upon which they can spend endless hours. With a non-loved person this would hardly be the case. Boredom would set in too rapidly.

But "love knowledge," if I may call it that, has other advantages as well. Love for a person permits him to unfold, to open up, to drop his defenses, to let himself be naked not only physically but psychologically and spiritually as well. In a word, he lets himself be seen instead of hiding himself. In ordinary interpersonal relations, we are to some extent inscrutable to each other. In the love relationships, we become "scrutable."

But finally, and perhaps most of all, if we love or are fascinated or are profoundly interested, we are less tempted to interfere, to control, to change, to improve. My finding is that, that which you love, you are prepared to leave alone.

Could love be a requirement of scientific investigation? Whether or not it could be made into a professional obligation, and enforced, the idea has great appeal. It would mean, for example, that you wouldn't make a statement about another person, another group, another race, unless you felt able to say to yourself that you had identified with that "other" to the point of being able to do justice. And what is "justice" for one who is a lover?

As an aside, it might be noted that the writings of great naturalists—men who spent their lives outdoors and in wilderness areas—have a very different quality from that found in the work of laboratory researchers. We sometimes call these men "nature lovers," and they make better reading, offer another kind of "knowledge," and are far better "identifiers" than the technicians. Are these differences important for "decision-making"?

Social scientists are now becoming an important resource of both government and industry. What if a qualification for being a social scientist were an emotional inability—because of love felt for other human beings—to manipulate people in any way? Would that be a good thing? Could it lead to reforms in government policy? In employer-employee relations?

The fact that a qualification of this sort could not be produced on demand, nor even "taught" in graduate schools, is hardly an objection to the

idea. It might be very fine, in other words, to have such men in the social sciences. There was, after all, a time when requirements of this sort were not regarded as either impracticable or improbable. The Hippocratic Oath is an example. In a paper which first appeared in these pages ("Science and Self-Actualization"), Dr. Maslow showed how far modern medicine has departed from the spirit of Hippocrates:

To a certain extent, science education is a training in the obsessional *Weltanschauung*. The young man is rewarded *only* for being patient, cautious, stubborn, controlled, meticulous, orderly, neat, and the like. . . . The non-scientists, the poets, the religious, the artists, and ordinary people in general, may have a point in their fear, and even hatred, of what they see as science. They often feel it to be a threat to everything that they hold marvellous and sacred, to everything beautiful, valuable, and awe-inspiring. . . . I think I can best make this clear by an example from my experiences in medical school (30 years ago). I didn't consciously realize it then but in retrospect it seems quite clear that our professors were almost deliberately trying to "blood" us, to teach us to confront death, pain, and disease in a cool, objective, unemotional manner. The first operation I ever saw was almost paradigmatic in its effect to desacralize, *i.e.*, to remove the sense of awe, or privacy, of fear, or shyness, and of humility before the tremendous.

Is "knowledge" at issue in such prejudicial scenes? Is there no distinction to be made between dehumanizing attitudes and a sober "objectivity"? How far must a callous indifference to human feeling go as a means to "keep the church out of scientific affairs"? For that is the only available explanation for the deliberately coarsening effect of the practice in the medical schools of the time Maslow describes.

For our purposes, what this deliberate cold-bloodedness in the sciences illustrates, more than anything else, is the effect of the polemical spirit which pervaded the pioneer sciences during the early centuries of their development. These disciplines, starting with physics, were *forced* to become defensive/aggressive, because of the oppressive policies of the religious institution of

that period. The comment, today, must be that this is no way to obtain impartial knowledge. The conflict situation recreates in another form the very evils that are to be overcome. The feeling of opposition crystallizes self-righteousness in all parties involved, and the spurious certainty of the side-taker becomes a ruinous flaw in both the victors and the resentful vanquished.

Returning to Piaget's principle, there are other illustrations of the importance of identification to be considered. Actual knowledge, no matter what sort, is impossible without it. In physics the student does not learn without performing experiments himself, and he learns the most when he designs his own experiments, sometimes improving on those given in familiar texts. As William J. J. Gordon, who taught undergraduate physics at Harvard, has said (in the *Education of Vision*, Braziller, 1965):

Perhaps the greatest danger in the teaching of science is to present students with a *fait accompli* universe. It is a didactic tradition that undergraduate students must accept the phenomenological universe as described by someone with special knowledge, *i.e.*, the teacher. The teacher is saying to the students that they must surrender to his rules or they can't play in his backyard. By the time a student has clerked his way through his undergraduate work in a science, it may be impossible for him to tolerate the ambiguity of constructing his own ways of understanding.

In other words, a student, or anyone, understands the natural world only to the extent that he has made it a part of himself, a practical extension of his own being, and experienced its working in himself. There is no better practical example of this than the truck driver who knows how to back up a semi-trailer attached to his tractor. Often an expert driver will back into a narrow gate or passage with only inches to spare on each side. It is as though this complex and cumbersome vehicle is a part of his own body. He *knows* how to handle it.

Another sort of identification was spoken of by Gandhi. When black Africans, impressed by Gandhi's success in leading the Indians of South

Africa in their struggle for racial justice, asked him why their own leaders often adopted white men's ways and betrayed their own people, sometimes taking to drink as well, he said that no one could lead an oppressed people out of their troubles without identifying with the lowliest among them. Why should an African leader wear European clothes, he asked them? His people use very little clothes. To help the people, it is necessary to be one of them, not to be different from them, never to separate oneself from them. This was the example Gandhi set in his devotion to the Indian masses, the poor villagers and farmers. He spoke of the decaying villages of India as being like sufferers of an almost fatal disease, which require continual attention—nursing, he called it—until they regain some degree of self-reliant strength. He called the educated and well-to-do Indians to this kind of identification with the poorest of their countrymen. It was by this love of the helpless and the hopeless that Gandhi came to feel that he knew the hearts of other men, generating in him an indomitable belief in the potentialities of all men to remake their lives and to learn fellowship with one another.

It seems reasonable to say, then, that there are various levels of "knowing," all of them requiring a corresponding identification, but with each higher level calling for identification in more inward terms, involving increasing subjectivity. The principle remains the same; one must be what he would know; so that the acts of being and becoming are a conscious growing into the nature of what is to be known.

REVIEW

"AN EDUCATIONAL BOMBSHEL"

IN the lead article for last week, the following was quoted from Vinoba Bhave:

There is a false notion in the world that governments are our saviors and that without them we should be lost. People imagine that they cannot do without a government. I can understand that people cannot do without agriculture or industry, that they cannot get on without love and culture, music and literature, but governments do not come into this category. I would suggest that all our administrators and politicians should be given leave for two years, just to see what happens in their absence. Would any of the ordinary work of the world come to an end? Would the dairyman no longer make butter or the market gardener not sell his vegetables? Would people stop getting married and having babies? If the government were to take leave for two years it would destroy the popular illusion that a government is indispensable.

Vinoba Bhave, as many readers know, is a leader of the Sarvodaya movement in India. He was for many years a trusted colleague and friend of Gandhi, and early in the 1950's he undertook a practical program of land reform in the villages of India, a direct application of Gandhi's hopes and dream. It began with an appeal to the more substantial land-owners to share their land with landless peasants. Later this plan for voluntary redistribution of the land was worked out in the form of gifts to the village, which would then allot land to the members of the community, according to their capacities and needs. Basic reform, Gandhi held, must start at the bottom, with the needs of the poorest; and the villages of India, which include some eighty-five per cent of the Indian population, is the place to begin. Vast areas of land have been restored to the peasants as a result of this campaign, which has for its objective the achievement of self-reliance and self-sufficiency on the part of the common people. There is also an educational program to go with land reform.

It seems a rather extraordinary coincidence that the American engineer and inventor, R. Buckminster Fuller, who is also a distinguished reformer, has much the same ideas as Vinoba on the question of "government." Starting from the premise that governments have in the past had as their chief purpose the protection of the "haves" from the claims of the "have-nots," Fuller points out that the achievements of industry and technology have now made it possible for everyone in the world to have a high standard of living—better than "all yesterday's kings, without self-interferences and with no one being advantaged at the expense of another." In recent years Fuller has been devoting all his time to showing how this social dream might be realized. At his home base at the University of Southern Illinois (Carbondale), where he teaches Design Science, Fuller has been putting together the data of a World Resources Inventory, which periodically publishes reports on the information accumulated, together with statements and analyses by Fuller and his associates. MANAS has already reviewed the first four "Documents" on the World Resources Inventory, and we now have for attention two more of these Documents.

The parallel to Vinoba Bhave's thinking occurs in Document 5. After speaking of how the new potentials for economic plenty are overlooked by reason of old habits of thinking and fears, Fuller says:

We are faced with the necessity of developing effective ways to educate all humanity as rapidly as possible regarding this completely new and vital economic situation.

To start with, here is an educational bombshell: Take from all of today's industrial nations all their industrial machinery and all their energy-distributing networks, and leave them all their ideologies, all their political leaders, and all their political organizations and careful study shows that within six months, two billion people will die of starvation, having gone through great pain and privation along the way.

However, if we leave the industrial countries with their present industrial machinery and their energy distribution networks and leave them also all

the people who have routine jobs operating the industrial machinery and distributing its products, and we take away from all the industrial countries all their ideologies and all the politicians and political party workers and send them off by rocket ship to forever orbit the sun—the result will be that as many world people as now will keep right on eating, possibly getting on a little better than before. This will remove all the barriers to completely free world intercourse and thereby permit realization of enough for all.

The fact is that now—for the first time in the history of man—and only for the last ten years, all the political theories and all the concepts of political functions are completely obsolete—in any other than secondary housekeeping functions. Political ideologies are obsolete because they were all developed on the basis of the exclusive survival only of your party or my party—simply because there was not enough for both.

The whole realization that mankind now can and may be comprehensively and mutually successful is so startling that we must have it—as both the *whole* and as the *essence* of our forward undertakings. But, to have enough to go around for all requires a design revolution, for as now designed the world's metals are invested in machinery and structures which are so inefficient that they can only take care of 44 per cent of humanity. Engineers and scientists agree that the technical knowledge to correct this now exists. So it is also part of the great message to humanity of those who have the power to communicate that the world's problems cannot be solved by politics and can only be solved by a physical invention and design revolution.

Readers of Fuller would do well to reflect on the fact that this man has for years felt and acted, as Harold Taylor suggested earlier this year, as though the universe makes "a consciousness effort" to use him to illustrate its own principles. He bubbles with assurance, confidence, and practical achievement. Inevitably, much of his writing seems autobiographical. He plainly regards human beings as the conscious expression of natural process. To Fuller all nature is a part of man's organism, yet only partly integrated with him, and now to be used for learning and construction. To put his vision briefly, you could say that he sets out to make technology as efficient and as natural as the organs of the human

body. He has a mathematics and a physics of his own, endless energy, and a warm heart.

It may come as a surprise to find him concentrating—apparently—on "externals" as the means of carrying out the great reforms he proposes. Under the heading of "Design Strategy," in Document 5, he declares this principle:

Reform the environment—don't attempt to reform man. An adequately organized environment will permit humanity's original, innate capabilities to become successful. Politics and conventionalized education have sought erroneously to *mold or reform humanity*, i.e., the collective individual. . . . my philosophy and strategy confine the design initiative to reforming only the environment in contradistinction to the almost universal attempts of humans to reform and restrain other humans in order to conform them to "accepted" standards and codes. The reforming of others is subsequently manifest in attempts of grown-ups to reform other grown-ups' patterns through politically enacted law.

Obviously, Fuller is not against *self-reform*, but only against the presumptions of men who decide that they must reform *others*. This never works, and leads only to conflicts and wars. Throughout Fuller's writings, one finds him faithful to the idea that the initiative for human action and decision must come from the individual. He says in one place in Document 5:

Foremost of my personal disciplines is that: I must never attempt to sell one of my ideas to others. I must confine myself entirely to the production and testing of the invention. I find that there are always capable people who learn of my activity and ask, "What is it that you are doing?" When people ask me either for an explanation or my services, I give them the best I have. I, therefore, have no promotion and allow no promotion by any associates. I have learned that when you ask people to listen to you, they become too defensive.

The value of Fuller, as we have before suggested, lies in the wonderful combination of a free and magnificently inventive human being with a genius for grasping the practical principles of the operations of the natural world. Doubtless he is sometimes carried away. Doubtless he lacks

awareness of the importance of what E. F. Schumacher calls "intermediate technology," and of the crucial values, for many peoples of the world, of simple village life along the lines worked for by Vinoba Bhave. But one does not read Fuller to swallow him whole. The reader need not thrill ecstatically to his plan for one great pyramidal structure to house a "city" of a million people, nor share in his enthusiasm for the 10,000-passenger airplane which Lockheed has on its drafting tables, and which Fuller thinks of as a facility for an "instant city" that could be set up almost anywhere!

Fuller's importance lies in his motives, in his practical achievements, in his candidly altruistic thinking, and in his extraordinary ability to fire others to think freely and to act beneficently in behalf of the entire human race.

COMMENTARY
FULLER'S DREAM

THE great reformers have all been non-coercers. They set example, declared principle, spoke of moral law, but they seldom if ever told people what to do. Mechanistic direction does not work in the education of either the heart or the mind. The quotation from William J. J. Gordon in this week's lead article (page 8) on the teaching of physics shows how even technical education is defeated by instruction which suppresses the student's capacity to find his own way. The teacher may need to set some "limits," but he should not "direct."

A curious parallel to this principle in teaching is found in Fielding Hall's account of the role of the Buddhist monks in Burma. Hall was a magistrate in a village in northern Burma late in the last century. The monk, he said, was never consulted about village matters:

I know that, though I have many and many a time asked monks for their opinion to aid me in deciding little village disputes, I have never got an answer out of them. "These are not our affairs," they will answer always, "Go to the people; they will tell you what you want." Their influence is by example and precept, by teaching the laws of the great teacher, by living a life blameless before men, by preparing their souls for rest. It is a general influence, never a particular one. If anyone came to the monk for counsel, the monk would only repeat to him the sacred teaching, and leave him to apply it.

The capacity to decide for oneself what is right, and what is the right way to do things, may be the most precious quality of being human. This is surely the meaning of Buckminster Fuller's counsel to "reform the environment—don't attempt to reform man."

Yet Fuller seeks allies in working for his dream. The reform he believes in for human beings is the one he instituted in his own life. He tells how, many years ago, he decided to do no more work for merely personal gain. Then he saw, he says, "that a technology which produced

total economic success for humanity could eliminate the causes of war, *i.e.*, you or me to the death—on behalf of yours or mine—for there is not enough to sustain us both: the seemingly scientific fact established by Thomas Malthus and later fortified by Darwin's survival-only-of-the-fittest. All else that I have done since then (1927) has related to these design-science considerations." A dream like that requires an independent mind.

CHILDREN ... and Ourselves

LIFE ON A DESERT FORTY

A DELIGHTING book about nature is Ann Woodin's *Home Is the Desert* (Macmillan, 1964), which has an introduction by Joseph Wood Krutch. Mrs. Woodin lives with her four sons and her husband, who is a museum director and herpetologist, in a forty-acre square in the Arizona desert near Tucson. Those who enjoyed Krutch's *Desert Year* will also like this book. Originally a New Englander, the author says in the first chapter:

Having been nurtured on green and shade, the love of the desert came to me slowly, for it is a hard-mind place, and concealed in its openness. You cannot stroke it as you would a meadow, you cannot dissemble, nor are there corners in which to hide. You can only fling wide your arms, sprawl on the nail-bed, let the skin be punctured and the mind ooze out to be bleached in the sun. Then you will find yourself standing in the light, miraculously whole and as skeletal as the desert itself. In its qualities of severity and reserve, in its harmony of line and color, in its abstraction of design, lies an uncompromising formality. No other scene achieves this to such a degree. Once met on its own terms, it evokes a curious tranquility and composure.

The book, you could say, is made of the textures of love of the desert. Yet "love" can hardly be written about. One finds evidences of its meaning in what those who love are moved to do and say, in what they value above other things. Introducing an account of what her sons found of interest in the desert, Mrs. Woodin says:

To the adult eye, to the adult spirit, the desert above all else is remote. We do not see it move; we do not hear it breathe. Insidiously it sends out this quality of reserve and aloofness to steal into our consciousness like smoke, where it stifles our senses in a luminous aura of passivity. Were we metaphysically inclined we would remember that appearances are no more reliable than shadows and we would await its onslaught, for the desert has no intention of staying comfortably outside the house. In our four boys the desert has found just the accomplices it needs to infiltrate our lives most

effectively. I am still astonished at the pieces of desert to be found in their rooms and pockets. What a specific, surprising, and varied place their desert is!

This was a home where the visitor might encounter, as Mr. Krutch says, "snakes in the study, a tarantula in a glass cage, a bobcat in the children's quarters, and perhaps a coyote or a wolf with the dogs somewhere in the surrounding out-of-doors." Mrs. Woodin has plenty of "material" for this report of life on the desert. We leave this to the reader to discover for himself, in her book. Here we should like to provide some brief samplings, found in the last chapter, of the attitude which underlies everything else. Loving the desert, one realizes, is not a confining affection. The kind of love which is an end in itself has inner connections with every aspect of human life. Mrs. Woodin does not agree with certain of her friends who thought that the isolation of her family in a land of sands and cactus would prevent her children from learning "what life is all about!" The desert, she finds, is as good a place as any, and perhaps better than most, to make this discovery. These are some of her reasons:

I suppose everyone of us is concerned admittedly or not, with arriving at some definition of what is a good life so that we can live it, so that our children can. The unexamined life is of no more interest now than it was to Socrates, for what makes us different from the turtle is our awareness of ourselves, of our separateness, at once our curse and our glory. We stepped across the line, from animal innocence to recognition of self, a long time ago; and as we gazed about us with new-seeing eyes, we picked up a stone and scratched on a cave wall our wonder and our loneliness. . . .

Our definition of the good life would certainly not suit everyone, not because it is a desert with which we live, but nature. To some, nature is unessential, as only in man's world can they feel wholly sentient and alive. To others it is a fearsome thing. I once had a friend who sat nervously on the edge of our picnic, feeling threatened, and finally retreated to the house where nature could be looked at in small glances through protecting glass. Many others are like him, afraid that nature will rob them of their reason, for to them she is an irrational and malignant goddess out to get them; and her servants,

the animals, are lowly inferior creatures, the word "bestly" being one of censure. To them man, made in the image of God, is still the pivot of the universe, with the privilege of extinguishing the life of an animal or of a river. To respect animals is to deny man's dignity; to waste time in defending them is to blaspheme against the works of Michelangelo, Mozart, and Dante, and against the misery of the starving, the sick, and the poor.

But the joke of it is, of course, that unless a man respects other life, he won't respect human life, not even his own. Only with that simple yet infinitely compassionate gesture of caring for something different from himself can man display his humanity. "The ancient values of dignity, beauty, and poetry which sustain it (human life) are of Nature's inspiration: they are born of the mystery and beauty of the world. Do not dishonour the spirit of man" (Henry Beston).

There is balance and the right kind of sophistication in this book:

It would be cheating if I pretended that Rousseau's back-to-nature-and-the-simple-life routine is the whole story. A child must see both worlds, man's as well as nature's. When a child reads a certain combination of words in a book, listens to a certain combination of sounds on a record or in a symphony hall, looks at a certain combination of colors in a painting, the wonder that out of man's mind has come such beauty will grow in him and he will learn to honor man as well as nature, for how can he be whole unless he honors both? . . .

"Alienated" is the cry of those who today claim not to have been lulled into apathy by our comfortable, soulless, materialistic society, but our unhappy and angry young men are not so much alienated from society as from themselves. Their inner chaos does not give birth to a dancing star, but to a long sad wail of self-pity. Ironically, this plaguing isolation is the price we paid for our dominion. When we stride across the earth we accept as natural the flight of whatever animal we surprise, unaware that this is the root of our unbearable loneliness, for what is more alienating than our neighbor's fear and mistrust? Then, when a bobcat rushes up to you from behind a bush purring loudly, and rubs against your legs, you feel an enormous elation, as if you have suddenly been reprieved. Together you sit on the hill watching the sun set, and in the beat of both your hearts is the beat of all life since the beginning.

As a reassurance to readers, it should be said that the bobcat was somewhat domesticated. In the chapter on bringing up bobcats, there is this:

Even after weaning, our bobcats never gave up their love of rubber nipples. In fact, these became such an obsession that whenever they found one of our youngster's bottles, they would drag it off to some quiet place, such as the living-room couch, or better yet our bed, and chew on the nipple until it was demolished and they themselves were lying in a cold puddle of milk. If I discovered them so occupied and tried to remove the bottle, the cat would growl in what I judged to be a threatening manner. When I complained, my husband would comfort me by saying: "But dear, not everyone is so lucky as to have bobcats living with them."

All in all, what grows on Mrs. Goodin's reader is the realization that concern for the natural environment is far more than an ecological bookkeeping operation.

FRONTIERS

An "Ancestor" of Humanistic Psychology

THE *New York Times* (Sept. 4) report of the eighth annual meeting, held last month in Miami Beach, of the Association for Humanistic Psychology provided an apt summary of the recent history and significance of this group of professionals. Speaking of humanistic psychology as a "growing movement that is challenging the most basic precepts on which the study of human behavior has been based for a century," the reporter said:

Barely a dozen years old, the movement arose mainly as a "third force" protest against the two prevailing forces in psychology—behaviorism and Freudian psychoanalysis. The humanists have gathered many a convert from the psychological establishment, which still regards their movement with a certain amount of hostility.

While the movement is moving in many directions, humanistically oriented psychologists fundamentally see man as uniquely creative, controlled not by outside or subconscious forces, but by his own values and choices. They say, in effect that man must be seen as a whole and therefore resist the approach of behavioral scientists, who have sought to reduce many aspects of behavior to quantitative terms. They also reject the Freudian approach, which explores the inner recesses of consciousness, in favor of instilling a higher human awareness of "self actualization." And they seek to develop the greatest potential inherent in every person through "experiential" means.

Some fifteen hundred practicing psychologists, teachers, sociologists, scholars, and students attended this meeting, which was dedicated to the late Abraham H. Maslow, who is generally acknowledged to have been the major inspiration for the emergence of the humanistic view in psychology in modern times.

The *Times* reporter observes that this movement "has wide implications not only for psychology, but also for education, sociology, theology, and culture in general," and Dr. Maslow did not exaggerate when, in one of his last papers, he spoke of it as "a *Weltanschauung*." While

"revolution" is an abused and over-worked word, these days, the change in human attitudes and conceptions of man of which humanistic psychology is an expression certainly has long-term revolutionary implications. Basically, it is a change in the way men think of themselves. It becomes apparent on reflection that the far-reaching alteration in human affairs which took place during the closing years of the eighteenth century obtained its energy and irresistible momentum from a change of this sort. They began to think of themselves as "equals," in essence, in rights, and in possibilities, and vast political reforms were the consequence.

The change in the present is of a similar sort, but closer to the root of man's being in that increasingly its meaning is overtly declared to be psychological and philosophical. The very meaning of human life is being reshaped during the vast transition of which the humanist psychology movement is an important expression. Even in the brief recital of the *Times* reporter, the rich implications of what is happening to ideas about human growth and development are plain enough.

Interestingly, there are other parallels with the eighteenth century. For one thing, a "revolution," being animated by extraordinary enthusiasm and given to outbursts of unleashed feeling, may also lead to excesses. A cycle of revolution always has some need of Edmund Burkes, and for the balance and sagacity that were reflected in the *Federalist Papers* during the early days of the American Republic. It is not that Paine had not the better of the argument with Burke, but that stability and consolidation are always necessary to preserve the values of the growth-processes which have been set free. The leaders of the humanistic psychology movement seem thoroughly aware of this need, since the retiring President, Floyd Matson, said in an interview at Miami that over-simplifying attempts to induce "peak experiences" and heighten self-awareness could have dangerous consequences: "When kids turn on in an empty

way we worry about nihilistic overtones." There were similar warnings from other speakers, including an address on "Humanism and Violence" by Rollo May.

Another theme stressed at the meeting was the need for continued intellectual inquiry and thinking about basic theory. This was a particular strength of Dr. Maslow, who was as much concerned with the philosophic and historical foundations of humanistic psychology as he was with therapeutic practice. A book he particularly recommended, for example, is the recently published *Ego and Instinct* (Random House) by Yankelovich and Barrett, which offers a critical evaluation of Freud's work and theories, showing the heavy burdens he placed upon both psychological theory and therapeutic work as a result of his nineteenth-century inheritance of eighteenth-century materialism. Freud was still fighting the anti-clerical battle of the earlier revolutionary epoch, which led him to neglect what is now often termed the "spiritual" aspect of human nature. This neglect, you could say, represented the merely reactionary phase of the eighteenth-century revolution, for which the present cultural epoch has paid a very high price in its habitually low and even animalistic estimates of human nature. What Freud took for granted, but hardly ever mentioned, and entirely left out of his theoretical considerations, was the view of man as having spiritual potentialities. As he said to Binswanger: "Man has always known that he has spirit, it has been for me to show that he is instinctual." As the authors of *Ego and Instinct* put it: "In fact, a large part of psychoanalytical ego psychology is devoted to recapturing qualities of the human person which Freud simply took for granted in his reference to spirit but which we can no longer take for granted today."

Another writer who is not ordinarily associated with humanistic psychology has been of great service in redressing balances in the twentieth century. This is L. L. Whyte, whose *Next Development in Man* was first published in

the early 1940's and whose later work, *The Unconscious Before Freud*, is valuable for showing the wide variety of viewpoints which may develop from recognition of psychological realities which Freud interpreted with almost exclusively pessimistic tendencies.

A still earlier writer, Ian D. Suttie, a British psychiatrist who worked with the Tavistock Clinic in London, also offered searching criticisms of Freud which surely qualify him as an eminent "ancestor" of humanistic psychology. While Suttie died in 1935 at the age of forty-six, he put of record a respectful but devastating critique of what he regarded as Freud's chief mistakes. Readers of his book, *The Origins of Love and Hate* (Penguin, 1963), will find it filled with insights wholly consistent with the outlook of present-day humanistic psychology, and soundly based on both clinical and anthropological research. Suttie's main theme is the role of "love," as distinguished from the sexual drive, in human behavior. Much of this volume is given to showing Freud's personal withdrawal from the qualities of love and tenderness, with ample quotation from Freud's writings, together with a thoughtful attempt at explanation of these tendencies in the great founder of psychoanalysis. In a closing chapter he shows the inconsistency between Freud's theory and his practice, in the sense that "love" is almost taboo as a theoretical consideration, while, in the sessions with patients, the analyst's quiet tolerance for weakness, the lack of condemnation, and the devoted attentiveness of the therapist to the welfare of the patient are really, Suttie maintains, a practical manifestation of "love" and so regarded by the patient. "I consider," Suttie says, "that in the most 'passive' therapy the patient's need for love is met in numerous and devious ways." What success attends Freudian therapy, Suttie held, is the result of this love. He speaks, therefore, of the "systematic divergence between Freudian Theorizing and Freudian Practice":

Freud the Theorist spends every effort in denying love—though theory should be free from

strain and, still more, from mere negativism. Freud the Practitioner spends every moment in the "exhibition" of love—tempered certainly by anxious "withdrawals," e.g. in the passive technique. What is the explanation of this divergence which leaves a theory isolated from, and even opposed to, its ostensible practice and empirical basis?

Dr. Suttie has his answer to this question, but it is too involved for notice here. Freud's personal qualities are involved, and, in addition, a conscientiously "scientific" devotion to the "primary qualities" of matter as identified by Galileo, which led to exclusion of all else from disciplined investigation. However, a sentence or two cannot do justice to Suttie's analysis.

A keynote of the book is found in the Introduction, where Suttie remarks, in respect to its contentions: "When I began my studies of social behavior twenty years ago, I never imagined that I would come to attempt to put the conception of altruistic (non-appetitive) love on a scientific footing." Speaking in general of the scientific outlook of his time, he wrote:

If science had any philosophy of life it would be expressed thus: "We should wish what we see, not see what we wish." This attitude to reality probably constitutes the fundamental antithesis of science and religion, but we must consider whether the scientific attitude is not itself a denial of a section of reality—a denial, that is, of a body of fact as well as of a "bias of interest"—a range of data, too, which vitally concerns us as psychopathologists.

This is the foundation position of humanistic psychology.