

BEYOND PUBLIC TRUTH

IF there is such a thing as a public or popular mind, its principal support lies in respect for consensus. Long centuries were occupied in weaning the peoples of the West of their faith in medieval cosmology; Copernicus, as Ortega points out, was read almost exclusively by astronomers, and it remained for Giordano Bruno to begin the transformation of the Copernican theory from "a private discovery" into an actual "world change." And for his pains Bruno fell victim of the Inquisition. In Spain, in the middle of the eighteenth century, a clerical writer observed that the condemnation of the Copernicans by Rome was "superfluous partly because at that time we had not even heard that there was a Copernicus; partly because in the matter of doctrine (even in Philosophy and Astronomy) our country is as motionless as the terraqueous orb in the popular System." Why, Ortega asks, was Copernicus unable to change directly the world of his time? Because, he answers, science was not then regarded as the source of controlling truth. This view of science developed slowly. "Only within that general change in the evaluation of the sciences could the Copernican theory radiate all the formidable and vital consequences which were pregnant within it."

Ortega quotes Taine as remarking that man once accepted his dogmas from the Church councils, but now receives them from the Academy of Science, and comments:

At first, nothing seems more logical and prudent. What can give better direction to our life than science? Are we to go back to theology?

The fact that this reasoning seems to us so effective only shows that we still have one foot in modernism. The exact purpose of this book [*Man and Crisis*] is to make clear how it was that man came to have this ultimate faith in science in pure reason. But as this becomes clear to us, we may

discover that to confuse the perspective of science with the perspective of life has its inconveniences, that it creates a false perspective, just as did the acceptance of the religious, the theological, perspective as the vital perspective.

Today, in confirmation of Ortega's pioneering criticism, the world is filled with cries of reproach to the "pure reason" of science. The loudest condemnations are of the effects of certain applications of scientific knowledge, but there is also objection to the characteristic epistemological assumptions of the scientific method. A careful scientist will of course disclaim that science affords "the perspective of life," but when there is no other established theory of knowledge, the conception of science as the sole avenue to truth is inevitably adopted by the popular mind.

It should be useful, here, to identify some of those assumptions, as affirmed and defended by advocates who do indeed "confuse the perspective of science with the perspective of life." First, then, we quote from *Materialism Restated* (1927) by Chapman Cohen, an articulate champion as well as a candid thinker:

. . . the essence of the Materialist conception is that all the changes in this world of ours, physical, chemical, biological, and psychological, are strictly deterministic in character. The one thing that would be fatal to Materialism would be the necessity for assuming a controlling and directing intelligence at any part of the cosmic process. Against any such necessity we have the whole force of scientific thought. Science has been able to develop only so far as it has set on one side this primitive anthropomorphic conception and worked as though Materialism were an accepted fact. To put the matter in another way: the essential issue is whether it is possible, or is ever likely to be possible, to account for the whole range of natural phenomena in terms of the composition of forces. That is the principle for which Materialism has always stood. By that principle it stands or falls.

Plainly, by "composition of forces" Cohen means the forces known to physics and chemistry; he does not include anything even remotely suggesting psychodynamics, and he later adds that "whenever there has been a move towards a better understanding of natural processes, it has been based upon a tacit or an avowed acceptance of the mechanistic principle."

Cohen writes as spokesman for the materialistic outlook implicit in hard-core scientific practice which relies on the deterministic assumption. For an example of a similar outlook in the behavioral sciences, we quote from L. L. Bernard's *The Fields and Methods of Sociology*:

The old theological assumption of personal control through spirit direction, which later developed into a theory of spirit possession, and thence into a theory of an individual or personal soul (a permanent indwelling directive spirit), has given way, under the analysis of neurons, cortexes, and endocrines, to the behavioristic theory of the conditioned response and stimulus-response or behavior patterns. The spiritualists and the theologians and the metaphysicians have not welcomed this growth of a science of personality and they have not hesitated to reveal their intellectual character by their strenuous efforts to sweep back the oncoming tide of behavioristic science with their witch brooms on which they have been accustomed to ride in the clouds of spiritistic fancy. But in spite of this bit of diverting hobby-horse play a science of personality based on a measurable mechanics of behavior is bound to replace the old magical and mystical spiritism which still survives in the thousand and one cults that delight in calling themselves psychological.

Later representatives of this "world-view" would no doubt state their positions more cautiously, or at least more tactfully, but scores of such aggressive declarations could be gathered, all embodying similar confidence in the deterministic or mechanistic assumption in relation to both nature and man. What was the great attraction of the mechanistic assumption? Verified through observation and experiment, it could lead to indisputable public truth. While pioneers of science were needed to discover and confirm the laws of nature, their conclusions, once

demonstrated to the satisfaction of the scientific fraternity, would become part of the common knowledge of all men. So the vast edifice of human certainty would grow, until, finally, it brought comprehensive understanding of all the major problems of mankind.

This was the dream of the Enlightenment, based upon the growth of the sciences, and the sweeping enthusiasm it generated gave a moral dimension to the lives of all workers in research. It was a vision which grew slowly in the minds of the men of the eighteenth century, matured in the nineteenth as the credo of all believers in Progress, and in the twentieth century became a vague but universally accepted article of faith, supplying rhetoric to statesmen, humanitarian pretensions to commerce and industry, and persuasive imagery to the profession of advertising.

Today a strong wind has begun to blow in the opposite direction. Every branch of science has its rebellious anti-mechanists. Small groups of distinguished thinkers gather to present papers arguing against the simplicities of the Newtonian World Machine. Ranking biologists warn against the presumptions of thinking of the human body as no more than imperfectly organized tissues needing to be remodelled or improved by biochemical manipulation. Philosophers see a close connection between mechanistic science and a society dominated by the single-valued imperative of technological system—a system whose only "good" is more production. The entire mind-set of the first half of the twentieth century has been challenged again and again—first by a long series of disastrous events including wars, depressions, and moral disorder, and then by thinkers who are able to relate these disasters to distortions and opacities in modern ideas. One such critic is the late Abraham Maslow, a principal founder of the rapidly spreading movement of humanistic psychology, and originator of a psychology in which health and human wholeness are the primary goals. In *Religions, Values, and*

Peak Experiences (Viking paperback), Dr. Maslow wrote:

It is because both science and religion have been too narrowly conceived, and have been too exclusively dichotomized and separated from each other, that they have been seen to be two mutually exclusive worlds. To put it briefly, this separation permitted nineteenth-century science to become too exclusively mechanistic, too positivistic, too reductionistic, too desperately attempting to be value-free. It mistakenly conceived of itself as having nothing to say about ends or ultimate values or spiritual values. This is the same as saying that these ends are entirely outside the range of natural human knowledge, that they can never be known in a confirmable, validated way, in a way that could satisfy intelligent men, as facts satisfy them.

Such an attitude dooms science to be nothing more than a technology, amoral and non-ethical (as the Nazi doctors taught us). Such a science can be no more than a collection of instrumentalities, methods, techniques, nothing but a tool to be used by any man, good or evil, and for any ends, good or evil.

This dichotomizing of knowledge and values has also pathologized the organized religions by cutting them off from facts, from knowledge, from science, even to the point of making them the enemies of scientific knowledge. In effect, it tempts them to say that they have nothing more to learn.

Again, on dichotomized science:

We have been taught very amply in the last few decades that science can be dangerous to human ends and that scientists can become monsters as long as science is conceived to be akin to a chess game, an end in itself, with arbitrary rules, whose only purpose is to explore the existent, and which then makes the fatal blunder of excluding subjective experience from the realm of the existent or explorable.

So also for the exclusion of the sacred and the transcendent from the jurisdiction of science. This makes impossible in principle the study, for instance, of certain aspects of the abstract: psychotherapy, naturalistic religious experience, creativity, symbolism, play, the theory of love, mystical and peak-experiences, not to mention poetry and art, and a lot more (since these all involve an integration of the realm of Being with the realm of the concrete).

To mention only one example that has to do directly with education, it could be shown easily that

the good teacher must have what I have elsewhere called B-love (unselfish love) for the child, what Rogers has called unconditional positive regard, and what others have called—meaningfully, I would maintain—the sacredness of each individual. To stigmatize these as "normative" or value-laden and, therefore, as "unscientific" concepts is to make impossible certain necessary researches into the nature of the good teacher.

Or, for that matter, into the nature of the good man. Indeed, the psychology of the future will owe to Maslow and to some others of similar mind the restoration of these seminal conceptions—ideas of goodness, wisdom, spontaneous kindness, altruism, and moral strength—as the very meaning and structure of its discipline.

The body of Maslow's works, one could say, represents a lifetime's effort to show that the realities of inner experience, of man's subjective life, can, indeed, "be known in a confirmable, validated way, in a way that could satisfy intelligent men, as facts satisfy them." (His posthumous book, *Farther Reaches of Human Nature* [Viking, 1970], contains his final efforts in this direction.) Yet it must be recognized that this sort of knowledge is by no means the same in kind as the more elementary findings of, say, the physical sciences. The principles of mechanics are easily converted into what can be called public truth. One is led to accept these principles with very little exertion. In fact, most of the "truths" that can properly be referred to as "public" are virtually irresistible. A man may be indifferent to them, but he will not deny them, and he will not refuse conformity to what they imply for his behavior. So it should be added that, in many cases, the demand for "scientific truth" has behind it the feeling that, once a sufficient body of this truth has been accumulated, it will amount to a wholly justified bludgeon in the hands of righteous men, who will use it to *compel* assent to the now plain and evident laws of Nature. Who could deny the rule of scientific utopians armed with indisputable *fact*?

Yet overlooked in these ambitious plans is a great deal of experience showing that only the most elementary "truths" are sufficiently self-evident, even when carefully explained at the level of mass intelligence, to accomplish this rational compulsion. And in regard to issues where the emotions play a part, the application of supposedly public truth often becomes intensely controversial, with eminent experts of proven capacity ranged on opposite sides. Apparently, even public truth rapidly loses its authority in the presence of moral and emotional considerations.

Even so, it is certainly correct to say that there are large areas in all the sciences in which there is no dispute as to the facts and laws which form the main body of the knowledge accumulated. What is known in these areas may therefore be termed the public truth of our time. When it is invoked people are likely to respond. And it is still the consensus of the age that well-established scientific truths, relating to the objective realities of nature, can be relied upon and must be "accepted."

When we turn from this consensus to the proposals of Dr. Maslow, we come to what may turn out to be the basic difference between the past and the future, in terms of the sources of human conviction. Like the present-day "believer" in science, one could be a "believer" in religion in pre-Copernican times without any personal effort. Religious dogmas, as Taine said, were made explicit by the Church councils, and correct belief was explained in detail to all who needed to know. Popular science interpreters function in a similar manner today, and the prestige of the many "think tanks" around the country demonstrates that government and industry depend extensively on similar counsels. The rage for computer-produced guidance is a further illustration of this faith.

But the sort of demonstrations and assurances Dr. Maslow is talking about, through which a better understanding of values and human qualities and ends may be obtained, does require *individual*

effort. The life of the self-actualizing person cannot be the life of a mere acceptor of knowledge accumulated by others. The understanding Maslow writes about is self-created.

What then might be the foundation for a general consensus which would admit the reality of man's inner life, acknowledge the need for individual access to its meanings, and seek the enlightenment which an understanding of that life would tend to produce?

This is an extraordinary cultural project, and one on which, if the countless diagnoses and warnings of the present have any validity, our lives may depend. But this may be the wrong way to speak of entry to the inner life. What if its doors cannot open to a man in flight? What if the rules of the outer life, so familiar to us, are barriers to a beinghood governed by other laws?

In *The Poetics of Reverie* (Orion, 1969), Gaston Bachelard writes at length of the reverie which is, he says, "the *prima materia* of a literary work." He quotes from a novel by Henri Bosco in which a character speaks of a time when his dream world and his waking world interpenetrated, generating a third world between the two. This imaginative possibility makes Bachelard exclaim:

What an invitation to dream what one sees and to dream what one is. The dreamer's *cogito* moves off and goes to lend its being to things, to noises and to fragrances. Who is existing? What a relaxation for our own existence!

In order to have the sedative benefits of such a passage, it is necessary to read it *in slow reading*. We *understand* it too quickly (the writer is so clear!). We forget to dream it as it had been dreamed. In dreaming now, in a slow reading, we are going to believe in it, we are going to profit from it as from a gift of youth, to put our reverie youth into it, for we too, in the past, thought we were living what we were dreaming. . . . If we accept the hypnotic action of the poet's passage, our dreaming being will be returned to us from distant memory. A sort of *psychological memory*, calling an ancient Psyche back to life, calling back the very being of the dreamer we were, sustains our dreaming reverie. The book has just spoken to us of ourselves.

How can this be? Well Bachelard thinks it possible, and do we know enough of ourselves to know whether or not he is right? How is one introduced to one's self? Reverie is the seed bed of the poetic imagination, and more than one scientist has acknowledged that the sciences borrow conceptual vocabulary from poetic insight. Bruno's science was filled with it, and Bruno really embodied the Copernican revolution!

The inner man must be courted in unaccustomed ways, Bachelard suggests. He is not where one ordinarily looks for people:

On the contrary, active life, the life given animation by the reality function is a fragmenting outside us and within us. It rejects us to the exterior of all things. Then we are always *outside*. Always opposite things, opposite the world, opposite men with their mottled humanity. Except in the great days of true loves, except in the times of Novalis' *Umarung*, a man is a surface for man. Man hides his depths. He becomes, as in Carlyle's parody, the consciousness of his clothes. His *cogito* assures his existence only within a mode of existence. And thus through artificial doubts, doubts in which—if it dare be said—he does not believe, he establishes himself as a thinker.

One must believe Bachelard a man of infinite leisure, unpressed by time. Unpressed by fear or anxiety. Slowly, from his work, there comes a rare sense of the reality of the inner man, his riches, his shy presence, his unworldly delights. A sense of form finally emerges, although the author calls no attention to this. There are recurring notes in this study of reverie, in which Bachelard draws on many poets like himself. Like himself? Bachelard was for years a college professor of natural sciences who wrote books on the philosophy of science. Son of a cobbler, he became a postman in his youth, and then he studied chemistry and physics until he qualified to teach these subjects at the age of thirty-five. With *The Poetics of Space*, published in France in 1958, he turned to study of the origins of the poetic image. He died in 1962 at seventy-eight.

When a man of this caliber looks inward, he shows that there is indeed an order and a

discipline of subjective reality. The riches are there, and a sense of mythic universals seems to shape his thinking; it is a pattern enormously varied by the poets he quotes and the themes he develops. So the reader finds his way in a world of timeless excellences—timeless, yet drawn to singular measures by the living imagination of many men. Out of all this harvest of individuality come related images and symbols which in sum form a language of the soul—untaught, yet known, and given to speech which is devoted to ends that are the stuff of the common inner life. There is no straining in Bachelard's books, no haste, but no fatigue or lethargy, either. To read them is a lifting experience.

REVIEW

THE SACRED ART

THERE are books which seem diminished by a conventional report. Lost by mere description of the contents are the resonances which the book may produce. Octaves of extended meaning wait in the wings of such writing, needing only a modest effort from the reader to be called upon the stage of thought. It is better, then, to illustrate briefly the quality of such books—better, at any rate, than undertaking the impossible or misleading task of telling what is in them. Let their impact be felt by single examples, and return to them often, since books of this quality deserve to become part of the intellectual life of the times.

Wendell Berry's new volume, *A Continuous Harmony* (Harcourt Brace Jovanovich, \$5.95), subtitled "Essays Cultural and Agricultural," is a book of this sort. Here we shall speak only of the first essay, "A Secular Pilgrimage," which represents Berry's discovery of "natural religion" in English literature—mostly in poetry, past and present. We should say that this man writes with a forged intensity that gives freshness to everything he says. For the reviewer the essay is something of a lesson in the reading and understanding of poetry, corrective of an impatient mood resulting from efforts to comprehend poems that seemed plots against communication. But "A Secular Pilgrimage" offers much more than this. It is a study and celebration of the return of love for the wide, natural world—secular because immediate, spontaneous, unconnected with religious institutions.

Berry writes of "nature poetry," but the expression only clumsily conveys the character of this verse. It is poetry filled with unmediated reverence, unritualized devotion, a dialogue of the heart, yet richly articulate because the poet knows that what is loved deserves more than an outburst of feeling: love that is made into a work of the mind is love that has gained a life of its own.

What does "secular" mean? Berry means by it, independent of organized religion. By derivation, the word has to do with the passage of time, with the centuries, as distinguished from eternity. But in the verse Berry quotes one discerns the search for the eternal within the time-bound, the presence of the holy in the passing and the mortal. It is a piety of poets that cannot be imitated, because its reality is in the individual act of creation, not in any doctrinal shadow that might be taken as a tracing of its significance. Through certain modern poets, Berry senses a new awareness—a spontaneous pantheism—coming into the modern world. Surely, what he feels is akin to what Theodore Roszak speaks of in *Where the Wasteland Ends*—another book that does not submit to ordinary reviewing. Roszak, too, looks to the rebirth of Blakean religion—"Not the religion of the churches—God help us! not the religion of the churches—but religion in the oldest, most universal sense: vision, born of transcendent knowledge."

Berry confirms the old philosophical truism that man is himself a portion of nature become self-conscious. But to be truly self-conscious, a man must also know himself, which for him is to know nature. Then he can speak for the world. The poets Berry quotes are learning to speak in this way. From what do they now awaken, and would awaken us?

The contempt for the world or the hatred of it, which is exemplified both by the wish to exploit it for the sake of cash and by the willingness to despise it for the sake of "salvation," has reached a terrifying climax in our own time. The rift between soul and body, the Creator and the creation, has admitted the entrance into the world of the machinery of the world's doom. We no longer feel ourselves threatened by the God-made doomsday of Revelation, or by the natural world's-end foreseen by science. We face an apocalypse of *our own* making—a man-made cosmic terror. . . .

How did it happen? It could only have happened by our failure to care enough for the world, to be humble enough before it, to think completely enough for its welfare. Rather than be ruled by the thought of the world's good, which is identical with

our own most meaningful good, we have set up false standards of national interest, power, production, personal comfort or pride or greed—or the desire to get to heaven, which, if it involves the neglect of the life of the world, becomes only a rarefied form of gluttony. . . .

A man cannot hate the world without hating himself. The familiar idea that a man's governing religious obligation is to "save" himself, procure for *himself* an eternal life, is based on a concept of individualism which is both vicious and absurd. And this religious concept is the counterpart, and to a considerable extent the cause, of the vicious secular individualism that suggests that a man's governing obligation is to enrich himself in this world. Man cannot live alone—he cannot have values alone, religious or otherwise, any more than he can live by bread alone. Such desires can live only at the world's expense and at the expense of one's own earthly life, which one inevitably devalues in devaluing the earth. So when a man seeks to live on the earth only for the eternal perpetuation, or only for the economic enrichment, of a life that he has devalued and despised, he is involved not only in absurdity but in perversion—a perversion that has now become the deadly disease of the world.

Mr. Berry believes and quotes poets who feel that "the earth is not dead, like the concept of property, but as vividly and intricately alive as a man or a woman, and that there is a delicate interdependence between its life and our own." For testimony he quotes Thoreau, Whitman, Louis J. Halle, Thomas Merton, Chaucer, Andrew Manell, Henry Vaughan, Blake, Gerard Manley Hopkins, Wallace Stevens, Ezra Pound, Robert Frost, D. H. Lawrence, Kenneth Rexroth, Denise Levertov, A. R. Ammons, and Gary Snyder. But poetic imagery is more than testimony—it is also invocation and incantation, a form of the re-creative act. The reader goes on the pilgrimage, too.

Thomas Merton remarked that Greek tragedy brought catharsis which "delivers the participant from hubris and restores him to an awareness of his place in the scheme of things." Berry comments:

I think that this is to a considerable degree true of the best nature poetry, which seeks expressly the

power to deepen our insight into the very relationship Merton is talking about. Its impulse is toward the realization of the presence of other life. Man, it keeps reminding us, is the center of the universe only in the sense that wherever he is it *seems* to him that he is at the center of his own horizon, the truth is that he is only a part of a vast complex of life, on the totality and the order of which he is blindly dependent. Since that totality and order have never yet come within the rational competence of our race, and even now do not seem likely to do so, the natural effect of such poetry is the religious one of humility and awe. It does not seem farfetched to assume that this religious effect might, in turn, produce the moral effect of care and competence and frugality in the use of the world.

Here we have a resonance which reaches back to the Neoplatonic revival of the Florentine Renaissance—to Pico della Mirandola and Marsilio Ficino. Their concern with the infinity of the universe found man at the heart of things. Man's soul, Ficino wrote, "is the center of all and possesses the forces of all." As quoted by Giorgio de Santillana in *The Age of Adventure* (Mentor), Ficino continues:

It [the soul] can turn to and penetrate this without leaving that, for it is the true connection of things. Thus it can be called rightly the center of nature, the middle point of the universe, and the chain that links the world together. . . .

It is man's spirit which re-establishes the shaken universe, it is through its action that the physical world is continually transmuted and led nearer toward those spiritual regions from which it once issued.

Nicholas of Cusa, de Santillana observes, gave this conception focus. Cusanus was born in 1401, was educated at Devanter, in the school of the Brothers of the Common Lot, and at the University of Padua. He rose quickly in the Church and was sent by Pope Eugene as an emissary to attempt a reconciliation between the Eastern and Western Churches. Through such journeys he became a key figure in the restoration of Greek culture to Western Europe, and his own thought laid him open to the charge of pantheism. During a voyage of return from an attempt to reconcile Christianity and Islam, he says, a great

inspiration was born in him, which he set down in his book, *Learned Ignorance*. In it he contended that human knowledge is all conjecture, from which the only escape is through mystical enlightenment. While Cusanus has no particular scientific discoveries to his credit, he conceived, de Santillana says, the modern idea of mathematics as the "science of the infinite." He used mathematics to evolve a metaphysics rather than physics. The path to the summit of truth, he held, is by way of the infinite. Since the circle of infinite radius is also a straight line, it is of the nature of the infinite to present endless paradoxes to us. Yet he reasons that infinity is present in some sense in each finite thing—as the infinitesimal, perhaps. Deity is the infinite maximum—unknowable—but the universe, which deity pervades, is the *relative* maximum. In de Santillana's summary:

If every single thing is a particular manifestation of Infinite Being, the universe must be seen not merely as the sum of things but as the progressive "explication" of the initial "complication" at every point—a contrast and an oxymoron which portrays the relation of God and the world. And this is what is really implicit in the idea of the infinite sphere as the most complete symbol. Hence, concludes Cusanus devastatingly (fortifying himself with a somewhat similar statement attributed to Hermes Trismegistus himself), the universe can only be such a "sphere," *whose circumference is nowhere and whose center is everywhere*. It will have a peculiar kind of "general relativity" of its own, since there is no absolute space or frame of reference, and motion and rest depend from the point of observation: the condition being that the cosmos must be symmetrical in all its parts. *i.e.*, at each point it must appear as if this were the center. Thence also there can be no motionless "hub" as the Earth was supposed to be, but motion is everywhere; the only real "rest" would be infinite velocity, since maximum and minimum coincide. The resemblance here with present-day cosmological speculation based on the expanding universe, although shadowy, is by no means fortuitous. The closed sphere of the Aristotelian world has been exploded, consequences out of sight are coming up.

In *Learned Ignorance*, Cusanus says: "The relationship of our intellect to the truth is like that of a polygon to a circle; the resemblance to the

circle grows with the multiplication of the angles of the polygon; but apart from its being reduced to identity with the circle, no multiplication, even if it were infinite, of its angles will make the polygon equal to the circle." It follows that the mystic's approach to the Infinite or the Deific essence in all things will seem to be an approach to "nothing."

There is deep harmony between Wendell Berry's reading of the nature poets as a continual reminder that we are "the center of the universe" only with respect to our limited horizons, and the idea that all the rest of life lies beyond, having an infinitude of centers, but all participating in the universal essence or common center of life itself. Such a poet, then, is one who is able to feel his own presence in the wide world, and the life of the world in himself. This, surely, is a sacred art.

COMMENTARY
FINDING "ALTERNATIVE REALITIES"

IN his introduction to *Where the Wasteland Ends*, Theodore Roszak speaks of the dependence of humanists on the objectivist assumptions of scientific method. For generations they have been convinced that "the transcendent aspirations of mankind can be, *must* be, translated into purely secular equivalents," and to relinquish those assumptions still seems for many a wild leap into the unknown. As Roszak puts it:

To question the sufficiency of science even as an adequate understanding of the non-human world, to reject the validity of the secular ideals from which men and women have so long drawn their vital motivation, is to shake the stone on which our orthodox reality stands—and that cannot help but be a fearful event. One does not give over to the alternative realities without summoning up forces of nature and mind which urban-industrialism was designed to exclude, never to contain.

The difficulty, quite plainly, is that there are no approved, consensual definitions of "the alternative realities," and how does one move from the comforting exactitude of the physical sciences to the invisible presences felt by William Blake? It is clear that we shall not find in these other "forces of nature and mind" the same sort of easy security that we had come to rely upon in a science-based society.

Must we all then turn heroes and try to live by inner voices which have such uncertain identification? Or admit our hunger for consensus and "go back to theology"? Neither choice is acceptable. We need time to think; perhaps we can learn to hear.

There is interesting guidance in the high religions of the past. Certain ancient establishments were less denying than ours of the reality of transcendent truth. In the *Bhagavad-Gita* Krishna tells Arjuna that he cannot reach to final devotion until he has emancipated himself from all conventional belief. Conformists enjoy

their securities and rewards, but the true aspirant will reach beyond these.

This "open door" policy concerning truth is a necessity of all useful establishments—and they *do* have uses. For ours it would mean the adoption of a fitting humility, not only in principle, but also because of its endless practical failures. When conventional authorities begin saying honestly, "We do not know," intelligent men will no longer feel confronted by an all-or-nothing choice.

CHILDREN ... and Ourselves TRAINING POLICEMEN

A LONG article about the training program for cadets who are to be deputy sheriffs in the Sheriff's Department of Los Angeles County (Los Angeles *Times* for last May 28) is such an encouraging account of institutional change that it deserves attention here. The new program is the outcome of a series of trials comparing the results of radically differing methods of training. In consequence, there is a steady flow of visitors and observers to the Sheriff's academy from police departments and training centers in other parts of the country, and sometimes from abroad.

The *Times* story amounts to an outline of the career of Howard Earle, who in 1958 was advanced by Sheriff Pitchess from lieutenant at a small substation to commander of the Academy. Earle was then twenty-nine, a graduate of the University of California and a former training officer in the Army Officers Candidate School. The *Times* writer, David Shaw, relates:

When Earle first took over the academy, one of his first decisions was to institute what is known as a "stress" or "authoritarian" training system—rigid military procedures much like Army basic training. He ordered drills and marching and hazing. Trainees were required to wear their hats at precisely the right angle, to treat their superiors like gods and to undergo scathing verbal abuse and physical discipline for the slightest misdeed.

The theory behind this training was that a deputy sheriff's or policeman's job exposes a man to stress and his training should prepare him for such experience. Men who couldn't stand stress in training would not make good peace officers. Earle had been trained in this way and he believed in the system. He was, however, the sort of man who regarded belief as inadequate support for policy-making. Moreover, another sort of training was being recommended by sociologists and psychologists, who argued that "treating a man like a human being instead of an animal or a

machine produces a better man . . . and a better soldier or police officer." So, in order to prove that the stress method was the best, he instituted test training periods, choosing for the study men similar in background in many respects. Two groups of men, thirty-seven in each, were given contrasting sorts of training. The results of the first test did not seem conclusive, so, a hundred men were selected for the next trial, and the methods were refined and intensified. This time, after the findings were analyzed, Earle realized that he had been completely wrong in his belief that authoritarian, stress training was superior. As the *Times* writer puts it:

By every measurable standard, cadets given the non-stress program—friendly superiors, relaxed atmosphere, an opportunity to question and discuss their orders—far out-performed the cadets subjected to stress training.

"It was astounding," Earle says. "We not only followed them through their six months at the academy, we kept track of them for two years afterward, while they were on the job, in actual police work.

"We had their supervisors fill out very detailed monthly reports on every aspect of their duty and attitude—and the supervisors didn't know which ones were stress-trained and which were non-stress trained. The results were irrefutable. The non-stress guys are the best—and the happiest—on the job."

These tests were conducted in 1968. Soon after, with the support of Sheriff Pitchess, Earle changed the entire training program over to methods which respect the intelligence and human qualities of the recruits and teach them to exercise judgment and to think instead of merely following orders.

When the academy first opened in 1952, the training course occupied only three weeks. The term is now twenty-six weeks. Earle believes that there is much to learn about the possibilities of non-stress training, and that techniques are needed "for predicting, early in the training process, what really makes for a good police officer." In a doctoral thesis completed last year and accepted by the University of Southern California, he

maintains that police have always dealt with "criminals and crime far less than they deal with non-criminal situations." Most of the time the policeman is called upon to handle human problems:

"In the course of patrol he may help a stranded motorist, give directions, report a fire, search for a missing child, assist in obtaining medical aid, report a complaint about garbage collection, drive an intoxicated person home, arbitrate a family argument or relay information about government services."

The police officer is more of a social worker than a crime-suppressor, but only now is he beginning to have training as a social worker. Howard Earle is himself completely converted to continuing education. Last May, when interviewed by the *Times* reporter, he said: "This is the first semester since 1954 I haven't been going to school."

Earle's emphasis on the professionalization of police work and better training recalls the chapter, "Rebuilding our Police Departments," in James F. Ahern's recent book, *Police in Trouble* (Hawthorn, 1972). Ahern, who until recently headed the police department of New Haven, speaks of the importance of providing incentives to policemen to seek more education, then turns to the need for better training within the departments. He says:

A local administration can do a great deal in training for a price which is relatively small in comparison with its total expenditures. Training cannot be education. In fact, in some ways it is antithetical to education. Education by its very nature raises profound questions about police and their role in society. Training attempts to orient the recruit toward the job he will actually have to perform. As such its first responsibility is to allow the recruit to know who he is as a policeman and how he will handle complex and often dangerous situations under pressure. Although any good training program will give attention to basic skills such as first aid and the use of firearms, it should be made plain that the knowledge of these skills is incidental to the central function of policemen.

Ahern says much the same thing as Earle about the popular conception of policemen. "The

first task of the police trainer," he writes, "is to break down the recruit's preconceptions about police work." Invariably, he remarks, the recruits enter the force "with the notion that they will immediately be issued two-way wrist radios and sent out to match wits against sophisticated criminals." At New Haven, the training program instituted by John Heaphy included sensitivity training and encounter group sessions to uncover and break down the trainees' stereotypes of police work and open up for them the realities of the police role. Ahern comments that most police trainers "have been so taken in by mass media portrayals of the police role, and so enmeshed in the twisted workings of police departments as they now exist, that police training has come to consist almost solely of irrelevant and badly presented information structured around a set of carefully preserved fictions." A policeman has most of all to become aware of the complexities of human nature:

There is no way for a policeman who has been in a department for twenty years to know what is going on in the minds of juveniles or of college students or of members of ethnic groups who differ significantly from him. Human-relations training should attempt to make trainees aware of these things. One of the most effective ways for the police trainer to do this is to bring in the people, sit down the trainees, and have them talk to each other. New Haven's trainer brought in groups of semi-delinquent teen-agers for discussions and confrontations with police recruits. They were his "experts" when it came to training police to deal with juveniles. When it came to discussing civil liberties, he brought in groups of college students for similar discussions and confrontations. When a policeman is chasing a juvenile through a darkened housing project, or when he is facing a hostile demonstration of college students, it is too late to try to get him to understand. Unless he has come to grips with these people as human beings his reactions are likely to be inhuman.

All this, we may remember, comes under the heading of "training." For Mr. Ahern, education deals with the larger questions of social philosophy and matters of basic orientation and direction. But it takes *educated* men to plan the

sort of training programs Earle and Ahern have begun.

FRONTIERS

Issues Behind Defects

IN the August *Newsletter* of the Society for Social Responsibility in Science, Alice Mary Hilton discusses the fruits of the UN Conference on the Human Environment, held in Stockholm last June, concluding that the decision to establish a continuing organization was the most promising result. The first task of this body, she says, will be "to find some definition of 'a good environment'." This is difficult because "the question of development versus environment is hotly debated and no reasonable balance can be found." A general definition might be easy enough, but agreement on specific measures or limitations is another matter:

It is not only in the poor nations that development—industrial and technological—is considered more important than pollution of water and air, since poverty is considered the most dangerous pollution of all. In India concern for crops and the fight against malaria outweighs any fear of DDT. In the United States and Norway the fear of unemployment is much greater than fear of pollution. These are facts. And given the socio-economic and political realities of our world they are facts which could be ignored only by one who is totally unresponsive to human suffering. But it is highly probable that science and technology can find less dangerous alternatives to DDT, particularly if investment in scientific development is made not as much for immediate profit but for long-range improvements. The choice between unemployment and pollution is a political problem which will not be solved until the choice is eliminated. As long as the rich nations are convinced that a full-employment policy is the only road to prosperity—a policy that poor nations are convinced must be introduced by them also—people will choose pollution rather than starvation.

So the "cost-benefit" studies go on and on. The World Environment Newsletter in *World* for Sept. 26 reports on the work of the Organization for Economic Cooperation and Development, a research group sponsored by twenty-three of "the richest, most highly industrialized countries in the

world," as now having turned to bettering the environment. The approach:

"The objective of preserving and improving environmental quality, important as it is," says an OECD pamphlet, "is only one of the many objectives of economic and social policy. These different objectives may sometimes appear antagonistic and need delicate trade-offs." And that is OECD's main business: to try to harmonize a continuing—if now qualified—expansion of the international economy with concern for a better, cleaner environment.

OECD researchers, the *World* report says, are seeking to determine "just how bad" the pollution caused by the pulp and paper industry is, country by country, and to price the best control techniques. Other groups are "studying the impact of motor vehicles on the environment and on air pollution from stationary sources of fuel combustion." As time passes, there will be "row on row of meetings on both sides of the Atlantic and often in Japan and Australia." There will also be—

comparative studies of what individual governments are doing about a problem, cost-benefit analyses, and studies of trade-diversion effects, and high-level recommendations to spur governments to act. But the OECD is critically handicapped—as are the UN and all other global and regional cooperative bodies—by lack of machinery for adopting common rules and then enforcing them supranationally.

A similar difficulty affects the individual nations. Addressing the American Bar Association in London last year, Judge Irving Kaufman spoke of the inadequacy of the decision in the *Scenic Hudson* case, counted a victory for the environmentalists. The ruling stopped Consolidated Edison from building a pump storage generating plant at the foot of Storm King Mountain on the Hudson River. Against a background of continued brownouts and blackouts in summertime New York, Judge Kaufman told his audience:

The basic defect in the process, as I see it, was the inevitably narrow scope of the decision the agency had to make: whether or not to license a single and specific electric generating plant. The narrow scope of the decision before the agency led necessarily to a

strictly limited discussion of the issues by the public. Questions of other possible sites or of a planned dispersal of power plants and the like could not be discussed by public-interest groups because these issues were not before the agency.

A federal agency "with sufficient authority, power, and purse to choose among the infinite patterns of potential development" does not exist. Or, as the Academy of Sciences panel examining the problem of the assessment of technology concluded: Our society "does not know how to value in a quantitative way such goals as a clean environment and the preservation of future choices."

In time, doubtless, such agencies will be formed. In time, compromises on the issues defined by Alice Hilton will be more urgently sought. But apart from the question of time which many regard as crucial—there is the larger issue of essential human attitudes. In his Introduction to the *Progressive* volume, *The Crisis of Survival*, Benjamin DeMott points out that poets and essayists have cried out against the "dehumanization of the Earth" for more than two centuries. Schiller and Carlyle anticipated present critics, often in more fundamental psychological terms. Americans from Hawthorne to Fitzgerald have denounced the rape of the countryside, and in England writers from Blake to Lawrence called for a "new ethic." Rilke declared, "You must change your life," and that remains, says Mr. DeMott, the condition of survival:

For the crisis of survival doesn't simply call into question once more the worth of respected institutions, or the gospel of success, or the bootstrap myth, or the sanctity of abundance technological revolution, "laborsaving devices," automation, "economic order," and the rest. It challenges the conception of personal development and self-realization that has governed Western culture for centuries, established its sense of public and private priorities, given it its deepest understanding of crime and virtue, taught it the terms on which history can be regarded as purposeful.

These are the ideas which may have to be reformed or replaced, and they will not be put

aside merely from fear or in flight. Men need better reasons than "survival" for instituting an order of changes such as Mr. DeMott calls for. Other voices, long ignored, which speak from serene and unanxious depths, must now be heard.