

THE ENVIRONMENT OF MEANING

THE best thing about science—which may prove its saving grace—is that it can be turned against itself. An institution which does not shut out self-criticism and self-correction is a remarkable achievement, not often duplicated in historical experience. Yet science, as Thomas S. Kuhn has shown in *The Structure of Scientific Revolutions*, has on various occasions demonstrated this ability. An illustration is obtained by comparing Bertrand Russell's statement of the scientific view of the world as "purposeless" and "void of meaning"—all that we are and happens to us "but the outcome of accidental collocations of atoms" ("A Free Man's Worship," 1903)—with the result of the thoughtful research of Lawrence J. Henderson, published ten years later in *The Fitness of the Environment*. This large volume is devoted to showing that there is "not one chance in countless millions" that the uniquely appropriate combinations of natural elements which make possible the phenomena of life were or are the result of chance. "These are," he affirmed, "no mere accidents; and the explanation is to seek."

A cautious man, faithful to his training in skeptical method, Henderson found no explanation, confessing only that "we appear to be led to the assumption that the genetic or evolutionary processes, both cosmic and biological, when considered in certain aspects, constitute a single orderly development that yields results not merely contingent, but resembling those which in human action we recognize as purposeful."

Prof. Henderson hazards no guess as to the underlying character or ultimate intent of the "purpose" he recognizes in the physical organization of the cosmos, but simply suggests that *some* purpose, *some* meaning, must exist. This, whatever else it may be, seems at least a modest transcendence of the strict mechanistic or

materialistic assumptions of scientific method, indicating that some other mode of inquiry will have to attempt the determination of meaning.

But what means shall we use? Obvious suggestions would be religion or philosophy, or perhaps a branch of psychology informed by metaphysical postulates (something that many psychologists would regard as a contradiction in terms). But before leaping to direct pursuit of one of these alternatives, we might ask: Could there be a corresponding "fitness of the environment" for the determination of truth? Might a study of history reveal some sort of benign collaboration of the elements of culture, favorable to the discovery of themes of meaning in the world and human life? Henderson looked at the facts as given in our experience of physical existence and reached his qualified conclusion. Are there corresponding facts in the universe of thought concerned with meaning

This question takes us into the grain of our common intellectual life, past and present. The richest cultural source we have is undoubtedly East Indian civilization, and we turn to *Myths and Legends of Hindus and Buddhists* by Sister Nivedita (Margaret E. Noble) and Ananda K. Coomaraswamy for the substance of an environment of meaning. In his preface, Coomaraswamy tells how these ideas of meaning and purpose have been presented—how they became a part of the life of the mind in the East. He says:

My aim has been to relate in a manner as close to the original as possible, but usually much condensed, such of the myths as are more or less familiar to every educated Indian, with whom I include all those illiterate but wise peasants and women whose knowledge of the *Puranas* has been gained by listening to recitations or reading, by visiting temples (where the stories are illustrated in sculpture), or from folksongs or mystery-plays. The

stories related here, moreover, include very much of which a knowledge is absolutely essential for every foreigner who proposes in any way to cooperate with the Indian people for the attainment of their desired ends—nowhere more clearly formulated than in their mythology and art.

Such material is obviously what we are looking for, since "desired ends" represent the fulfillment of meaning, while attention to those ends should reveal the purpose of life for those who pursue them. The book becomes an embodiment of the great Indian epics, the *Mahabharata* and the *Ramayana*, since, as Sister Nivedita says, "in India mythology is not a mere subject of antiquarian research and disquisition," but a "living mythology which, passing through the stages of representation of successive cosmic process and assuming definite shape thereafter, has become a powerful factor in the everyday life of the people."

The authors begin with Valmiki's *Ramayana*, a story of the recovery of a ravished bride, often likened to the *Iliad* of Homer.

The story of Rama is told in one of the *Jatakas* [Buddhist Birth Stories, recounting 550 previous lives of the Buddha], which may be regarded as a shorter version, one of many then current. . . . As a whole, the poem in its last redaction seems to belong essentially to the earlier phase of the Hindu renaissance, and it reflects a culture very similar to that which is visibly depicted in the Ajanta frescoes (first to seventh century A.D.); but of course the essential subject-matter is much more ancient. . . . Not the least significant feature of Valmiki's epic lies in its remarkable presentation of two ideal societies: an ideal good and an ideal evil. He abstracts, as it were, from human life an almost pure morality and an almost pure immorality, tempered by only so much of the opposite virtue as the plot necessitates. He thus throws into the strongest relief the contrast of good and evil, as these values presented themselves to the shapers of Hindu society. For it should be understood that not merely the lawgivers, like Manu, but also the poets of ancient India, conceived of their own literary art, not as an end in itself, but entirely as a means to an end—and that end, the nearest possible realization of an ideal society. The poets were practical sociologists, using the great power of their art deliberately to mould the development of human

institutions and to lay down ideals for all classes of men. The poet is in fact, a philosopher, in the Nietzschean sense of one who stands behind and directs the evolution of a desired type. Results have proved the wisdom of the chosen means; for if Hindu society has ever as a whole approached the ideal or ideals which have been the guiding force in its development, it is through hero-worship. The *Vedas*, indeed, belonged essentially to the learned; but the epics have been translated into every vernacular by poets such as Tulsi Das and Kamban, ranking in power with Valmiki himself. The material of the epics, moreover, as also many of the *Puranas* has been made familiar not only to the literate, but also to all the unlettered, not excepting women, by constant recitation, and also by means of the drama, in folksong, and in painting. Until quite modern times no Hindu boy or girl grew up unfamiliar with the story of the *Ramayana*; and their highest aspiration was to be like Rama or Sita.

Such, for thousands of years, has been the cultural environment of the people of India. As a briefly amplifying note, we add the observation of an American scholar. Writing in a monograph on Indian art, W. Norman Brown has said: "Sculpture was not meant to be a reminder of a human being, but of something abstract, spiritual in its reality beyond apprehension by the senses, an ocular reference to universal knowledge that might somehow become comprehensible to humanity."

To the skeptical comment, well, look at India today, the appropriate reply would be to advise looking, in turn, at the full history, over millennia, of this motherland of civilization—its arts, its sciences, and its sublime religio-philosophic literature. In India we have an example of a classic traditional society, as impressive in its cultural unity as in the depth of its thinking and aspiration. We ourselves live in another age and place, born into a very different environment of meaning, one filled with conflict, fierce argument, and opposing schools and ideologies. India, however ravaged by invaders and torn by political conflict, never had an experience comparable to the cultural and psychological revolution of the eighteenth century in the West. Her philosophers

and scientists were not either burned at the stake—as in the case of Bruno, who dared to contradict the dogmas of the Roman Church—or placed under house arrest and silenced by threat, as happened to Galileo.

Free thinkers in India were not driven to extremes of denial of *any* spiritual reality, in order to guarantee an end to the tyranny of priestcraft and the ruthless bloodshed of religious wars. The ideas concerning truth and its recognition, held and taught in India, were free of the impress of angry polemics, devised as much in behalf of the simple right to independent thinking as in pursuit of impartial truth.

Our intellectual history has varied widely from the experience of the East. As Bertrand Russell put it in 1925 (in his Introduction to Frederick Lange's *History of Materialism*):

Historically, we may regard materialism as a system of dogma set up to combat orthodox dogma. As a rule, the materialistic dogma has not been set up by men who loved dogma, but by men who felt that nothing less definite would enable them to fight the dogmas they disliked. They were in the position of men who raise armies to enforce peace.

The broad result of such compulsions may be studied in the doctrines of the far-reaching historical movement called the Enlightenment, which originated mainly with the *philosophes* of eighteenth-century France. The environment of ideas they created has been well described by Isaiah Berlin in his recent book, *Against the Current* (Viking), a study of the history of ideas. He says:

Whatever the differences that divided the French *philosophes* and their disciples in other countries (and these differences were deeper and more numerous than is often supposed), there existed nevertheless a wide consensus: it rested on an acceptance of what was, in effect, a secular version of the old natural law doctrine according to which the nature of things possessed a permanent, unalterable structure, differences and changes in the world being subject to universal and immutable laws. These laws were discoverable in principle by the use of reason and controlled observation, of which the methods of

the natural sciences constituted the most successful application. The most powerful instrument in the acquisition of knowledge was held to be mathematics. Whether this was due to the fact that the basic structure of reality was itself such that mathematics was an abstract representation, or symbolisation, of it, or, alternatively, whether mathematical methods were no more than the most reliable means of recording, predicting, and therefore controlling nature, whose real character remained inscrutable, was a less crucial issue than what followed from either assumption: namely, that the true path to knowledge was that of the natural sciences; that is to say, all statements with claims to truth must be public, communicable, testable—capable of verification or falsification by methods open to and accepted by any rational investigator. From this it followed that all other types of authority were to be rejected and in particular such foundations of faith as sacred texts, divine revelation, tradition, prescription, immemorial wisdom, private intuition and all other forms of non-rational or transcendent sources of putative knowledge. This principle was held to apply to both the human and the non-human world: to abstract disciplines, such as logic or mathematics to the applied sciences which established the laws of the behaviour of inanimate bodies, planets, animals and human beings, and to the normative disciplines which revealed the true nature of ultimate human goals, and the correct rules of conduct, public and private, social and political, moral and aesthetic.

According to this doctrine, all genuine questions were in principle answerable: truth was one, error multiple; the true answers must of necessity be universal and immutable, that is, true everywhere, at all times, for all men, and discoverable by the appropriate use of reason, by relevant experience observation and the methods of experiment, logic, calculation.

To the men of the Enlightenment, this outlook seemed a wholly generous and impartial invitation to all serious thinkers, with the added advantage that it excluded what seemed to them poetic nonsense and speculative metaphysics. And as for feeling—had not the whole world suffered for centuries under the psychological and moral pressures of misguided religious emotion? Let us make ourselves free of all that, they said, and acknowledge as potentially true only those

clear and distinct ideas which can be subjected to empirical and rational tests.

In the light of its original inspiration, the doctrines of the Enlightenment have a liberating ardor which explains their lasting influence, right up to the present. But today they have been turned into what John Schaar calls "the bureaucratic epistemology," amounting to a denial of the unique reality of wholes, and leading to impatient rejection of any conception based on "conscience, trained prudence, intuitions, dreams, empathy, or even common sense and personal experience." All acceptable knowledge must have been established in "objective" terms, and all solutions are matters of finding the right technique. As Schaar says:

This conception of knowledge entails a whole conception of reality. Reality is that which is tangible, external, measurable, and capable of being precisely conveyed to others. Everything that is left over—and some might think this is half of life—becomes curiously unreal or epiphenomenal. If it persists in its intrusions on the "real" world, then it must be treated as trouble; and those who act from motives embedded in the unreal world are treated as deviant cases in need of repair or reproof.

We are now in the midst of a great revolt against the crystallized forms of the Enlightenment theory of knowledge. The rebellion cuts across all cultural, class, and ideological lines, revealing a radical change in what people now think is important in and to their lives. There is a definite revival of individualism—not the rugged sort, but an individualism which seeks self-defined modes of cooperation, interdependence, and fellowship. The conception of knowledge is changing—a transformation to which physicists, biologists, psychologists, psychiatrists, sociologists, and economists are contributing, along with essayists such as Lewis Mumford and Theodore Roszak. The ideas of Blake and Thoreau are enjoying a renaissance, and the Platonists are again attracting the attention of students and scholars. The subjective side of human life is asserting its inimitable authority, gaining champions from areas of brain research along with philosophers of

science such as Michael Polanyi and psychologists such as Abraham Maslow. In 1977 Theodore Roszak told an audience gathered in Vancouver:

In our time a secret manifesto is being written. Its language is a longing we read in one another's eyes. It is the longing to know our authentic vocation in the world, to find the work and the way of being, that belong to each of us. . . . I speak of the Manifesto of the Person, the declaration of our sovereign right to self-discovery. I cannot say if those who have answered its summons are indeed millions, but I know that its influence moves significantly among us, a subterranean current of our history, that awakens in all those it touches an intoxicating sense of how deep the roots of the self reach, and what strange sources of energy they embrace. . . .

In *The Aquarian Conspiracy* (Tarcher, 1980, \$15.00), Marilyn Ferguson compiles literally hundreds of such expressions, many of them produced in the grain of innovative scientific activity and research, and she generalizes in useful ways as to the meaning of what seems a planetwide awakening. Early in her book she writes of the anticipations of ideas which are now coming into full bloom:

Those who had premonitions of transformation believed that future generations might detect the invisible laws and forces around us: the vital networks of relationship, the ties among all aspects of life and knowledge, the interweaving of people, the rhythms and harmonies of the universe, the connectedness that captures parts and makes them wholes, the patterns that draw meaning from the web of the world. . . . The themes of transformation have emerged with increasing strength and clarity over time, gathering impetus as communication expanded. At first the traditions were transmitted intimately, by alchemists, Gnostics, cabalists, and hermetics. With the invention of moveable type in the mid-fifteenth century, they became a kind of open secret but were available only to the literate few and were often expressed by church or state.

Among the bold and isolated voices were Meister Eckhart the German churchman and mystic of the fourteenth century, Giovanni Pico della Mirandola in the fifteenth; Jacob Boehme, a German, in the sixteenth and seventeenth; Emanuel Swedenborg in the seventeenth and eighteenth.

We are spiritually free, they said, the stewards of our own evolution. Humankind has a choice. We can awaken to our true nature. Drawing from our inner resources we can achieve a new dimension of mind; we can see more.

The central issue of Isaiah Berlin's book, quoted above, is that "no full account of the truth can exclude the data of direct experience, of our immediate knowledge of what it is to be a human being," as the editor, Roger Hausheer, says in his introduction. Berlin's essays give the names and examine the thoughts of writers who, in the midst of the Enlightenment, were demanding balance and recognition of man's rich inner life. Vico, Herder, Hamann, and Jacobi were champions of the human spirit, in much the same way, although in other language, as the advocates of subjective inquiry of today. Berlin says:

That to dissect is to murder is a romantic pronouncement which is the motto of an entire nineteenth-century movement of which Hamann was a most passionate and implacable forerunner. Scientific dissection leads to cold political dehumanisation, to the straitjacket of lifeless French rules in which the living body of passionate and poetical Germans is to be held fast by the Solomon of Prussia, Frederick the Great, who knows so much and understands so little. The arch-enemy is Voltaire, whom Herder called a "senile child" with a corrosive wit in place of human feeling.

So, even in a civilization filled with controversy, bitter wars, and aggressive partisanship, there have been those who redressed balances, maintained touch with inward sources of inspiration, and kept alive a fitting environment of ideas filled with the potentiality of meaning in human life.

REVIEW

VICO—NOW A CONTEMPORARY

IN 1732—nearly two hundred and fifty years ago—Giambattista Vico, who was probably the first European who grasped the importance of the study of history, and who explained in principle how it should be done—gave an oration to the students of the Royal Academy of Naples. Such addresses, he said, were an old custom which he would renew, offering himself, in the words of Horace, as "a whetstone, that an edge can put on steel, though itself be dull and cannot cut." He inaugurated the coming season of studies (he spoke in October) by urging his youthful hearers to seek what he called "heroic wisdom," the title of his address being "On the Heroic Mind."

Some passages from this oration will help to explain why Vico, so long neglected and ignored, has increasing attention from scholars in these days of painful rebirth of vision and human aspiration. He said:

Noble students, you are to bend your best efforts toward your studies, not surely with such an end in view as the gaining of riches, in which the low money-grubbing crowd would easily beat you out; nor for high office and influence, in which you would be far outdone by the military and by courtiers; and still less for that which leads philosophers on namely, love of learning itself, enthralled by which all of them pass their whole lives withdrawn from the public light in order to get the full enjoyment from the tranquil working of their minds and nothing else. Something far more exalted than this is expected of you. "Well, but what is it?" one of you may say, marveling: "Are you asking of us something surpassing the human condition itself?" I do indeed so reckon it; but although surpassing, yet befitting that nature of yours.

I repeat: it is expected of you that you exert yourselves in your studies in order to manifest the heroic mind you possess and to lay foundations of learning and wisdom for the blessedness of the human race; but by this course of action, not only will riches and wealth accrue to you, but also honor and power will come looking for you, though you care for none of these things. When I speak of your manifesting the heroic mind through studies, I am not choosing those words lightly. If heroes are those

who, as poets say or as they invent, were wont to boast of their divine lineage from "all-judging Jove," this much is certain: the human mind, independent of any fiction and fables, does have a divine origin which needs only schooling and breadth of knowledge to unfurl itself. So you see, I do ask of you things greatly surpassing the human: the near-divine nature of your minds—that is what I am challenging you to reveal.

We have this first translation into English of Vico's address on the heroic mind as part of *Vico and Contemporary Thought*, edited by Giorgio Tagliacozzo, Michael Mooney, and Donald Phillip Verene, and published in 1979 at \$20.00 by the Humanities Press. Why is Vico held to be important for contemporary thought? Because he was truly a *seminal* thinker. His ideas continuously fertilize other minds. What, essentially, did he say? He said that we know only what we are able to create. This alone is enough to make of Vico a contemporary. As for history, we can know it only as we recreate the past through the power of the imagination.

There are twenty-four contributors to this volume, among them Isaiah Berlin, who has been a major figure in the revival of interest in Vico. Some comment by Rollo May will illustrate the intensity and relevance of this interest. Remarking that we are now living through the final phase of the Renaissance, a time of cultural disintegration, he says that Vico would have understood the present, and that Vico's thinking might well be adopted as philosophical foundation for a new understanding of how we think and know. Dr. May writes:

Anxiety, alienation, insecurity are visible on all sides. As a time of vast and widespread preoccupation with psychology, our own age is parallel to the Hellenistic age in Greek times. Or the fourteenth and fifteenth centuries, the time of disintegration and transition of the Middle Ages.

In such times the central problem seems to me to be the disintegration of myths. Myths furnish the intellectual and spiritual framework of the society. There are nonmaterial forms of relationship between significant elements in the society. Vico would have understood this exceedingly well, as we know in

reading his analysis of poetry and language. (I hope it is entirely clear that I am rejecting the common definition of myth in our day as "falsehood," and instead am defining myth as the moral pattern by which a society knows itself and thus finds its own identity.) One symptom of this disintegration is the tremendous growth of different religious sects in our country, as in meditation, yoga, etc. The yearning for these forms of "myth" is to some extent genuine, but the way it is approached is ungenue. Each movement seems to be given the attribute of absolute truth and the devotee treats it as such, but then in a year or so he is off to give his devotion to another quasi-religious or quasi-psychological sect.

Vico, Dr. May believes, is a resource for the principles of a new psychology:

The science we seek must be not only inductive but deductive as well. It must posit, as Gregory Bateson has indicated, not only the existence of facts but also the existence of fundamental laws of science, the latter being the source of deductive thinking. This will make humanistic psychology a combination of hypotheses that will have a degree of *universality*. Second, this theory will deal with human beings as *symbolizing* creatures. Vico would have applauded this, for he knew that the awareness of our human capacity to think in symbols is the beginning of the discovery of new forms of mythology. Third, the new theory must be rooted in a positive approach to human nature rather than merely a negative. By that I mean we define human beings not in terms of neurosis but, rather, in terms of health; not in terms of boredom but of creativity, as creatures with imagination.

While Vico promised the Neapolitan students of his time the rewards of riches and fame, even though, he said, they did not seek them (which may be a Platonic exaggeration), he was not himself so favored. He was out of key with the sweep of the Enlightenment. Like the Cambridge Platonists of the previous century, he was critical of Descartes, claiming that the abstract ideas of the Cartesian mathematicians could not be made the basis of general education. But his claims were ignored; the day of the anti-Cartesians had not yet dawned. The present is the high noon of their objections, and Henry J. Perkinson, an educator, finds Vico's ideas at the root of present educational theory:

. . . today the modern methods of study are all based on this notion of man as the creator of knowledge. The modern methods of education reject the old spectator epistemology that resulted in "receptor" classrooms where students received knowledge (or—according to the pedagogical metaphor used—where students absorbed, accumulated, or swallowed knowledge). In place of receptor classrooms we now have modern activity classrooms where students construct and create knowledge. The names of John Dewey in the United States, Maria Montessori in Italy, Decroly in Belgium, Kerchensteiner in Germany, and Piaget in Switzerland all immediately spring to mind as the major modern educational theorists who have conceived and developed the active methods of study of our time. And all these theorists share the fundamental tenet that man makes knowledge, a tenet that each came up with independently.

None of these educational theorists ever evidenced any awareness of the work of Giambattista Vico—which, of course, given the history of Vichian scholarship, is quite understandable. Yet one wishes they had studied Vico, if only because his work contains solutions to some of the contradictions inherent in the methods of study of our time.

Another contributor, Joseph Maier, tracing the lines of influence in the works of recent thinkers, in particular Max Horkheimer, draws on a study by Ben Halpern for an illuminating distinction between myth and ideology:

(1) The study of myth is a study of the origin of beliefs out of historic experience. The study of ideology is a study of the molding of beliefs by social situations.

(2) The social function of myth is to bind together social groups as wholes or, in other words, to establish a social consensus.. The social function of ideology is to segregate and serve special interests within societies in the competition of debate.

Our purpose here is not so much to "review" a book which only scholars are able to evaluate, but to show why such books keep on coming out. Two further quotations will help, the first from Benjamin Nelson:

Wherever Vico looked he saw *meanings* gathered in histories—embedded in custom, in lore, in poetry, in myth, in religion, in science, and most of all in the laws of all peoples of whom he had any

knowledge. His passion to extend the understanding of men's ways and all the laws of the nations asserts itself strongly in all his writings, including some which continue to cry out for fuller treatment than they have so far received.

The other is by Talcott Parsons:

If physical science, grounded in the philosophy of Rene Descartes, can be considered to have played the paternal role in modern scientific development, I think it may be appropriately suggested that humanistic studies have played the "maternal" role. They have been the source out of which encouragements to broadening the scope of the original physical-science synthesis have been derived; thus they have played a kind of "womblike" function. After all, human culture and knowledge have been created only by human action. It is in no simple sense a mere reflection of the "out there" facticity of external nature. This realization was particularly strong in Vico's work.

Quite evidently, the fire of Vico's intentions now burn more brightly than in his own time.

COMMENTARY

"WHAT MUST I DO TO GET THERE?"

IN this week's Review, Rollo May attributes the psychological and emotional disorder of our time to the disintegration of myths. This seems an about-face from the prevailing opinion of only a few years ago, when we were told that we must learn to "demythologize" our thinking. Dr. May calls myths "the intellectual and spiritual framework of the society." How is this so?

A concise answer is found in Harry Schlochower's book, *Mythopoesis* (Wayne University Press, 1970), a study of the uses made of mythic stories by the giants of Western literature. How is the myth a framework of our lives? Don Quixote may be a good example. People may laugh at Quixote's methods, Schlochower says, but "*nobody laughs at the idea behind them.*"

Quixote's mission is to free the noble resources which he believes are present in all. And, by acting as if goodness, justice and honor are inherent in all, he encourages them to come alive. And here are the practical effects of Quixote's idea: His courteous treatment of the inn-keeper, the prostitutes and others results in their acting in a courteous manner. All sense that his idea is the reservoir of inspiration and hope, of kindness, courage and loyalty, that without it, their life would be a drudge. . . . Toward the end of his life, Quixote declares that he has been "too daring." In this admission, he realizes that no one, however brave, can go it alone. Like Faust, Quixote renounces his superhuman claims and accepts the fact that man must eat dust. But, whereas Faust and other Renaissance heroes fight primarily for themselves, Quixote would be the sacrifice for others. This motive "to live dying," as he puts it, distinguishes him—as Turgenev and Waldo Frank point out—from other mythic heroes, such as Hamlet and Ahab. Quixote's sacrifice has for its aim freedom, justice and peace on earth.

Some defining ideas are offered in the Preface:

In the form of a picture, a story or a song, myth touches on man's basic relation to his world and fellow men, on his original roots, his future possibilities and destiny. . . . The myth addresses

itself to the problem of identity, asking "who am I?" And it proceeds to examine three questions that are organically related: "Where do I come from?", "Where am I bound?", and "What must I do to get there?"

One sees why Rollo May said what he did.

CHILDREN ... and Ourselves

SCHOOLS: A MODEST DEFENSE

IN "Children" for last April 2, devoted mostly to review of John Holt's paper, *Growing Without Schooling*, the following paragraph appeared:

The case for schools is obvious enough. Knowledge and wisdom are scarce. You can't buy them, although they can be given away. The only real excuse for a school is that the village or town or city needs a place for providing rare knowledge and wisdom with an identifiable focus—a *focus* not of what every parent is better able to give the children but of what is beyond the natural resources of the parental role. This may be an art or a science. A school, you could say—speaking ideally—is out of line whenever it presumes to teach a child what he can learn more naturally at home. Holt's paper affords a radical perspective on these questions. Involved, of course, is a radical transformation of the home.

A reader who apparently found this passage to be flawed responded by saying:

You say, "Knowledge and wisdom are scarce." Let's take knowledge first. Why do you say it is scarce? Everybody knows something, in fact, everybody knows quite a lot of things. It's a school-fostered idea that a few people know a great deal and most people know almost nothing. A self-serving, mistaken, harmful notion.

As long as we think of a school as a place where the ignorant many can come to sit at the feet of the knowing few, we are going to go wrong. What we do need are places and devices in which and with which large numbers of people may *share* their experience, skill, and knowledge.

What is this rare knowledge that we can get only from school? You and I, and many others, have learned a great many things in the past year, five years, ten years. I haven't learned any of them in a school, and I rather suspect the same is true of you.

Wisdom is something else. You say "knowledge and wisdom" as if they went together somehow—knowledge-and-wisdom. The fact is that there is no necessary connection and rarely any real connection. Is Harvard full of wise men?

This is a good letter—one with some sense in it—but as criticism it seems to miss the target, being really aimed elsewhere. It attacks the abuses common in schooling as though they represent the only possible meaning of a school or schooling. The MANAS article said that the only excuse for a school is to provide a place where rare knowledge and wisdom may have a focus, in order to teach what is ordinarily beyond the parental role—and we spoke of an art or a science to illustrate.

For example, Gandhi started a school, at Sevagram in India. He wanted to teach the young and teach teachers how to save and reconstruct the villages of a vast agricultural land. But surely all those millions of peasants knew how to farm! They'd been doing it for thousands of years. Well, they both knew and didn't know what to do. Sir Albert Howard learned some of the secrets of organic gardening from them, but he taught them just the same. And he taught the world, by books and sometimes through schools.

Getting back to Gandhi: explaining his purpose, he said:

We have to tackle the triple malady which holds our villages fast in its grip: (i) want of corporate sanitation; (ii) deficient diet; (iii) inertia. . . . They (the villagers) are not interested in their own welfare. They don't appreciate modern sanitary methods. They don't want to exert themselves beyond scratching their farms or doing such labor as they are used to. . . .

So, among other activities, Gandhi started a school. Presumably, the people who did the teaching were armed with the knowledge needed to remedy at least some of the problems of the villagers. As for the distinction between knowledge and wisdom, our correspondent is of course right. The distinction is needed. Usually, knowledge means little more than information, while wisdom is knowing its right use and the reasons for that use. Yet the fact remains that wise individuals accumulate knowledge in a way that is different from its aggregation by others. Their knowledge has a living quality because it is

acquired for use by the wise. It has some of the feeling-tone of its collectors. It carries some wisdom with it, just as a place where wise individuals congregate takes on a feeling of the presence of wisdom—we call it, after a time, a hallowed place. It was in this sense, perhaps, that knowledge and wisdom were joined in our article. And surely there is a *necessary* connection between knowledge and wisdom, for what would wisdom do without facts to work with? Wisdom is about the relationship of facts to the meaning of life. When facts are detached from wisdom, you get the mindless bureaucratic arrangements of most of the institutions of our time—not only schools. When wisdom is detached from facts it has nothing to say. As an old philosopher said, Spirit mounts on the shoulders of matter in order to get somewhere, to be of use.

Again, what is a school? Is it Mark Hopkins on one end of a log and a student on the other, or is it P.S. XYZ in New York City? The writer of our article called the school a "focus," a place where teachers may be found—teachers of things not commonly known or understood. Our correspondent seems to think there are no such things. We disagree. There are all sorts of things one may want or need to know which are not commonly known. Astronomy, for example. As Arthur Morgan once pointed out, the need for specialized knowledge of this sort to be made available was the origin of schools, but then, as the schools took over more and more responsibility, the natural transmission through the family of the everyday knowledge that everyone needs and everyone used to have began to break down. It is this, one might think, that our correspondent mainly deplures, and rightly so. Maybe some people are able to learn quite difficult things without a teacher, getting all they need out of books, but the majority, one suspects, need help of the humanly sensitive sort that good teachers provide.

At the same time, the alternative our correspondent suggests is very much in order.

We need, he says, *resources*, including learning exchanges and more "cheap mini-libraries, with modest collections of good books and magazines, and without all the expensive filing arrangements of most libraries." These would be not only agencies for the spread of knowledge—the *free flow* of knowledge—but their use would lead to increasing self-reliance, leaving less and less for the schools to do. This is a way of saying that a strong culture would have very few schools, but the few might be very good.

What is wrong with the schools of today—so wrong that to many thoughtful people it seems a good plan to abandon or ignore them entirely? The reason most frequently given is that they have become barriers instead of contributors to learning. The criticism is not new. Tolstoy maintained that education should serve to bring about equality between teacher and learner, while the institutions of his time perpetuated inequality. The purpose of establishing equality—making the student equal to the teacher, and therefore free of the need for a teacher—had been replaced by other motives and theories. Tolstoy called these theories the false foundations of education:

The first and most operative,—the child learns in order not to be punished; the second,—the child learns in order to be rewarded; the third,—the child learns in order to be better than the rest; the fourth, the child, or young man, learns, in order to obtain an advantageous position in life.

These foundations . . . may be classified under three heads: (1) Learning on the basis of obedience; (2) learning on the basis of egotism; and (3) learning on the basis of material advantage and ambition. . . .

By admitting that the equality of knowledge is the aim of the learner's activity, I see that upon reaching this aim the activity itself stops; but by assuming obedience, egotism, and material advantages as the aim, I see, on the contrary, that however obedient the learner may become, however he may surpass all the others in worth, no matter what material advantages and civil rights he may have obtained, his aim is not reached and the possibility of the activity of education does not stop. I see, in reality, that the aim of education, by admitting such false bases, is never attained, that is, the equality

of knowledge is not acquired, but there is obtained, independently of education, a habit of obedience, an irritable egotism, and material advantages. The adoption of these false foundations of education explains to me all the errors of pedagogy and the incompatibility of the results of education with the demands, inherent in man, made upon it, to which these errors lead.

It is obviously much easier to correct these errors through education in the home. Schools are places where such errors are institutionalized, along with other complications.

Institutions, by reason of being organized, always reinforce weaknesses instead of strengths, which in teaching are personal and individual. Institutions do this because of the organizational requirement that operations be uniform and smooth—very nearly the opposite of what growing human beings need. This is the strongest argument we know of against schools. They seem designed for mediocrity. But then, there are schools and schools. Some of them need and have very little organization. Such schools are of course small.

FRONTIERS A Little Gets Through

THE endless polemics used to further movements for change or reform—or used against them—go on and on. This time-honored "adversary" procedure seems inevitable, but continual exposure to such broadsides, both for and against, makes one wonder how much gets through, and whether another sort of writing, writing without aggressive side-taking, would not in the long run prove far more productive.

Another point: MANAS is continually suggesting what seems good or important reading, but there is just too much to read, these days. We all want to live normal lives, but moving in that direction apparently involves doing a lot of abnormal things, which seems a bit ridiculous. The end has to be in the means, as philosophers keep on pointing out.

Living a "normal life" in a world so badly pulled out of shape may be too much to expect. People who spend their lives redressing balances get pulled out of shape, themselves, and one may be grateful that they are willing to do it, whatever the personal cost. They may seem a little distorted in their outlook and habits, but whose fault is that?

Meanwhile, we are all oppressed by an excess of reading matter. It sometimes seems that we could easily do without about 95 per cent of all that is published. The barrage of words clutters our minds, gets into the bloodstream of thought and, unless we are careful, coarsens our thinking processes. It becomes harder and harder to respond to words when there are so many of them.

But some work—the really good work, which is not partisan (whatever its appearance), but simply on the side of life—does get through. Suppose Rachel Carson, in the interest of living her own normal life, had stopped writing *Silent Spring* in the face of massive opposition from "the

interests"? First there were threats and objections; then, after its publication in 1962, the attacks became systematic. In *Since Silent Spring*, Frank Graham Jr. gives samples (in a chapter reprinted in the *Ecologist* for last March):

Some of the criticism aimed at *Silent Spring* makes amusing reading. F. A. Soraci, director of the New Jersey Department of Agriculture, had this to say in the *Conservation News* at the time of the book's publication: "In any large scale pest control program we are immediately confronted with the objection of a vociferous, misinformed group of nature-balancing, organic-gardening, bird-loving, unreasonable citizenry that has not been convinced of the important place of agricultural chemicals in our economy."

Ironically, many of the attacks on Rachel Carson were prefaced by a bow to her "graceful writing." It was with this sort of gallantry that P. Rothberg, president of the Montrose Chemical Corporation of California (a manufacturer of DDT) introduced his remarks on *Silent Spring*. He went on to say that Rachel Carson wrote not "as a scientist but rather as a fanatic defender of the cult of the balance of nature." And William B. Bean, M.D., writing in *Archives of Internal Medicine*, went even further by saying he was sympathetic to Rachel Carson's cause. He added, however, that *Silent Spring*, "as science, is so much hogwash. . . . I was made curious again and again by her disregard of the rubrics of evidence, of a nice regard for scientific validity, or of any feeling that what she presented should be unbiased."

But the only sentence in *Silent Spring* that he quotes to show her disregard of evidence is this one from Chapter 3 (page 13): "For the first time in the history of the world, every human being is now subjected to contact with dangerous chemicals from the moment of conception until death." Dr. Bean found this "an astonishing statement." Even more astonishing, however, were his own circumscribed views about the mobility of DDT residues. They have been discovered in remote regions of the world where spray planes have never intruded; they have been discovered even in mother's milk.

The chemical industry presented an almost united front against what it considered the menace of Rachel Carson. There were allegations made at the time that certain chemical companies threatened to withdraw their advertising from gardening magazines and newspaper supplements that gave favorable mention to *Silent Spring*.

So it goes. If you are able to be an effective champion of the cause of a natural life and a normal planet, "fanatic" will be among the gentler adjectives used against you. And yet . . . and yet . . . there is some truth in some of the criticisms of some of the advocates of change. In a book which studies these embarrassing realities—*Paper Heroes—A Review of Appropriate Technology*—the author, Witold Rybczynski, says (in a chapter called "California Dreaming"):

The marketing of a life-style, like the marketing of a soft drink, requires gross oversimplification combined with positive user reinforcement. Problems are minimized or left unmentioned; the *image* takes precedence over the *reality*; *acquiring* is more important than *learning*. "American society has a remarkable capacity to absorb change," Norah Ephron once wrote, "and then turn it on its head." The public acceptance of what was now starting to be called "alternative technology," and which—once the energy scare was over—would mutate with "intermediate technology" to become "appropriate technology," had turned many of the lessons of the outlaw designers on *their* heads. The protests of [Stewart] Brand and others went unheeded.

The most harmful effect of this commercialization process was the claim of many books and magazines that the youth culture now had "its own technology," a counterpart to its own clothing and its own music. The claim was untrue not only because all three were almost completely the product of large non-youth enterprises, but also because it maintained that there were different "kinds" of technology, whereas science, technology, and common sense demonstrated the opposite. Windmill rotors follow the same aerodynamic principles as airplane propellers; in some ways they are neither simpler nor less complicated. But the purveyors of people's technology were selling books (above all) on precisely the premise that there *was* a "new technology" (cheaper, simpler, etc.). Public gullibility being what it is, and the fact that other experts were at the same time advocating the "new mathematics," the "*nouvelle vogue*," even the "new left," made it inevitable that this schizophrenic view of technology should take hold. The single largest entry in the cumulative index of *The Whole Earth Catalog* and *The Whole Earth Epilog* was for items beginning with "new": there are thirty-six entries. For those interested in such illuminating trivia, the runners-up were "black" and "China."

This sort of confusion will no doubt go on until we at last abandon the "adversary" method of achieving "justice" and "truth." How, one wonders, can we do without it, when so much that we are doing needs exposure and criticism?