

THE ALWAYS PERTINENT QUESTION

WHAT is the mind? The question, here, is no academic inquiry but a response to the wonder of what some people say about what they see. No mechanist explanation can apply. The ranges of imagination are not duplicated from one person to the next. The dictionary is prosily helpful. It says that mind is "the element or complex of elements in an individual that feels, perceives, thinks, wills, and especially reasons." Yet each term of explanation requires a similar quest, and the investigation finds only circular paths. Things defined in terms of themselves are simply accepted, not really explained. So, in order to reach some conclusion about the mind it is necessary to talk about it as though we knew what we were talking about. People have been doing this for millennia.

No great light has dawned.

What do the scientists say? They by no means agree. Thomas Huxley called the mind an "epiphenomenon," meaning that it is no more than an automatic function of the body. He proposed that thought stands to the physiological processes as the creaks and squeaks of a machine—a locomotive, say—stand to the wheels and moving parts that produce them. Yet a century or so later, Wilder Penfield, distinguished neurosurgeon, who had spent a lifetime in working on the brain, reached this conclusion:

For my own part, after years of striving to explain the mind on the basis of brain-action alone, I have come to the conclusion that it is simpler (and far easier to be logical) if one adopts the hypothesis that our being does consist of two fundamental elements. . . . Because it seems to me certain that it will always be quite impossible to explain the mind on the basis of neuronal action within the brain, and because it seems to me that mind develops and matures independently throughout an individual's life as though it were a continuing element, and because a computer (which the brain is) must be programmed and operated by an agency capable of independent understanding, I am forced to choose the proposition that our being is to be explained on the basis

of two fundamental elements. This, to my mind, offers the greatest likelihood of leading us to the final understanding toward which so many stalwart scientists strive.

Since in his book, *The Mystery of the Mind* (1975), Dr. Penfield says that as an undergraduate at Princeton he was much impressed by William James's *Principles of Psychology*, which aroused his interest in the brain and mind of man, we looked up what is probably James's last word on the subject of mind, given in an essay which appeared in the *American Magazine* in 1909. He wrote:

Out of my experience, such as it is (and it is limited enough), one fixed conclusion dogmatically emerges, and that is this, that we with our lives are like islands in the sea, or like trees in the forest. The maple and the pine may whisper to each other with their leaves, and Conanicut and Newport hear each other's foghorns. But the trees also commingle their roots in the darkness underground, and the islands also hang together through the ocean's bottom. Just so there is a continuum of cosmic consciousness, against which our individuality builds but accidental fences, and into which our several minds plunge as into a mother-sea or reservoir. Our "normal" consciousness is circumscribed for adaptation to our external earthly environment, but the fence is weak in spots, and fitful influences from beyond leak in, showing the otherwise unverifiable common connection. Not only psychic research, but metaphysical philosophy, and speculative biology are led in their own ways to look with favor on some such "panpsychic" view of the universe as this. . . . What are the conditions of individuation or insulation in this mother-sea? To what tracts, to what active systems functioning separately in it, do personalities correspond? . . .

What, again, are the relations between the cosmic consciousness and matter? Are there subtler forms of matter which upon occasion may enter into functional connection with the individuations in the psychic sea, and then, and then only, show themselves?—so that our ordinary human experience, on its material as well as on its mental side, would appear to be only an extract from the larger psychophysical world?

Not quite twenty years later, Sir Arthur Eddington, in *The Nature of the Physical World*,

reached the conclusion that the foundation of the universe is "mind-stuff"—not exactly "mind," nor actually "stuff," but *mind-stuff*. If, then, the universe is mind-stuff, what are we, who seem to be conscious parts of it? Are we living mirrors, clouded and dull on most of their surfaces, bright and perfect reflectors in spots? We are minds able to think about themselves, intelligences to which the power of apperception has been added. In *Pilgrim at Tinker Creek* (1974), Annie Dillard tells about young people, blind with cataracts from birth, who were suddenly able to see because of a new technique in cataract operations. The experience was frightening, and often the newly sighted patients closed their eyes for familiar security. The dazzling world of the senses was too much for them. One girl of twenty-one could find her way about the house only with her eyes shut.

Some do learn to see, especially the young ones. But it changes their lives. One doctor comments on "the rapid and complete loss of that striking and wonderful serenity which is characteristic only of those who have never seen." . . . On the other hand, many newly sighted people speak well of the world, and teach us how dull is our own vision. To one patient, a human hand, unrecognized, is "something bright and then holes." Shown a bunch of grapes, a boy calls out, "It is dark, blue and shiny. . . . It isn't smooth, it has bumps and hollows." A little girl visits a garden. "She is greatly astonished, and can scarcely be persuaded to answer, stands speechless in front of the tree, which she only names on taking hold of it, and then as the tree with the lights in it."

What instruction does the mind give the senses? Obviously, the mind is no passive affair. Annie Dillard says that after reading about the children who regained their sight, she began to see as they did. The world was made of color patches, but not for long. Seeing, for some, makes a reverie, and seeing and remembering will sometimes lead to a controlled sort of dream.

Nor can I remember ever having seen without understanding; the color-patches of infancy are lost. My brain then must have been smooth as any balloon. I'm told I reached for the moon; many babies do. But the color-patches of infancy swelled as meaning filled them; they arrayed themselves in solemn ranks down distance which unrolled and stretched before me like a plain. The moon rocketed away. I live now in a world of shadows

that shape and distance color, a world where space makes a kind of terrible sense. . . . Why didn't someone hand those newly sighted people paints and brushes from the start, when they still didn't know what anything was? Then maybe we all could see color patches too, the world unraveled from reason, Eden before Adam gave names. The scales would drop from my eyes; I'd see trees like men walking; I'd run down the road against all orders, hallooing and leaping.

Ideas, it seems plain enough, determine sight. Conceptions are discoveries before they are made. We see what we intend to see, inventing or even materializing as we go along.

When her doctor took her bandages off and led her into the garden, the girl who was no longer blind saw "the tree with the lights in it." It was for this tree I searched through the peach orchards of summer, in the forests of fall and down winter and spring for years. Then one day I was walking along Tinker Creek thinking of nothing at all and I saw the tree with the lights in it. I saw the backyard cedar where the mourning doves roost charged and transfigured each cell buzzing with flame. I stood on the grass with the lights in it, grass that was wholly fire, utterly focused and utterly dreamed. It was less like seeing than like being for the first time seen, knocked breathless by a powerful glance. The flood of fire abated, but I'm still spending the power. Gradually the lights went out in the cedar, the colors died, the cells unflamed and disappeared. I was still ringing. I had been my whole life a bell, and never knew until at that moment I was lifted and struck. I have since only very rarely seen the tree with the lights in it. The vision comes and goes, mostly goes but I live for it, for the moment when the mountains open and a new light roars in spate through the crack, and the mountains slam.

Annie Dillard is a writer and a poet. She uses her mind to read the manuscript, the palimpsest, of the world. Who are these people that tell us the mind is but a reflex of the body? That we don't really think, but only think we do? They must not, Maslow said, have ever had any children. They never discuss the difference between consciousness and self-consciousness. Mind determines the pattern of their lives, yet they claim it doesn't really exist, has no substantial being. John B. Watson felt discountenanced by the word "consciousness." Get rid of it, ignore it, don't speak of it, he said, as though you could talk yourself out of existence. Annie Dillard, an observer, makes this comparison:

Consciousness itself does not hinder living in the present. In fact, it is only to heightened awareness that the great door to the present opens at all. . . . *Self-consciousness*, however; does hinder the experience of the present. It is the one instrument that unplugs all the rest. So long as I lose myself in a tree, say, I can scent its leafy breath or estimate its board feet of lumber. I can draw its fruits or boil tea on its branches, and the tree stays tree. But the second I become aware of myself at any of these activities—looking over my own shoulder, as it were—the tree vanishes, uprooted from the spot and flung out of sight as if it had never grown. And time, which has flowed down into the tree bearing new revelations like floating leaves at every moment, ceases. It dams, stills, stagnates.

And yet this capacity for withdrawal, for shutting out the world for a time, makes self-questioning possible. Surely the mind, as we know it and use it, is a self-questioning intelligence. The questioning comes as a necessary sequence to wonder. Annie Dillard's is a book of wonder. Her wonder led to reflection on the state of the wondering human:

Innocence is not the prerogative of infants and puppies, and far less of mountains and fixed stars, which have no prerogatives at all. It is not lost to us; the world is a better place than that. Like any other of the spirit's good gifts, it is there if you want it, free for the asking, as has been stressed by stronger words than mine. It is possible to pursue innocence as hounds pursue hares; single-mindedly, driven by a kind of love, crashing over creeks, keening and lost in fields and forests, circling, vaulting over hedges and hills wide-eyed, giving loud tongue all unawares to the deepest, most incomprehensible longing, a root-flame in the heart, and that warbling chorus resounding back from the mountains, hurling itself from ridge to ridge over the valley, now faint, now clear, ringing the air through which the hounds tear, openmouthed, the echoes of their own wails dimly knocking their lungs.

What I call innocence is the spirit's unself-conscious state at any moment of pure devotion to any object. It is at once a receptiveness and total concentration.

Yet it is self-consciousness that clothes these reflections in words. The innocence of the human is a recovered innocence, a deliberated or caused self-forgetfulness. First comes the wonder, but then, in withdrawal, the human seeks meaning. Innocence reveals wonder undistorted by the twists of personal opinion, the clumsy partisanship

of self-interest. But to deal with a wonder in human terms, we seek its meaning—not the whole meaning, which might take us out of this world, beyond the ratios of our understanding, but the stuff of its meaning for us. If you look up "meaning" in the dictionary, you are told at the outset that it is "a highly ambiguous term." Meaning has to do with the passage of the mind to realization. It may be a simple identification of a "fact," but no real meaning stops there. It relates to a process we care about, a purpose or intention we have in mind.

So there are chapters in Annie Dillard's book that wrestle with questions of meaning. The wonders, so lyrically reported, so substantially described, become the raw material of the self-conscious mind.

Again, then, what is the mind?

If we go to the Greeks—specifically, Plato—we find it affirmed that mind is the ordering principle in both nature and man. Our minds discern causes through affinity with mind as the causal principle throughout the universe. In us it is the principle which identifies the highest and the best. Following Plato, Emerson declared (in "Nature") that both our intellect and our moral awareness lead to the realization that there is a universal mind which is present and the uniting principle in all humans—the active intelligence which sets causes in motion. He wrote:

Certain biases, talents, executive skills, are special to each individual, but the high, contemplative all-commanding vision, the sense of Right and Wrong, is alike in all. Its attributes are self-existence, eternity, intuition, and command. It is the mind of the mind. We belong to it, not it to us. It is in all men, and constitutes them men. In bad men it is dormant, as health is in men entranced or drunken; but however inoperative, it exists underneath whatever vices and errors. The extreme simplicity of this intuition embarrasses every attempt at analysis. We can only mark, one by one, the perfections which it combines in every act. It admits of no appeal, looks to no superior essence. It is the reason of things.

A partisan reading of that underlying reason is the origin of evil. The universal Mind works with the good of the whole in view. As Robert Cushman, author of *Therapeia*, says in his first

chapter of this book on the philosophy of Plato, "the root character of *nous* (divine intelligence), in man and in the world, is consciousness of Good by which it is solicited and to which it is pledged." Understanding the world requires the understanding of the mind. The goal of self-knowledge, therefore, in no way excludes knowledge of the world. Self-interest is the blinding factor. As Emerson continues:

On the perpetual conflict between the dictates of this universal mind and the wishes and interests of the individual the moral discipline of life is built. The one craves a private benefit, which the other requires him to renounce out of respect to the absolute good. Every hour puts the individual in a position where his wishes aim at something which the sentiment of duty forbids him to seek. He that speaks the truth executes no private function of an individual will, but the world utters a sound by his lips. . . . We have no idea of power so simple and so entire as this. It is the basis of thought, it is the basis of being.

Periodically, critics of "mere" reason arise. Mind, they say, is far from being all, and here one can agree by showing that we may be of two minds, the better and the dearer. Macneile Dixon makes suitable reply to these critics:

Yet when all has been said against the human understanding that can be said, it still refuses surrender. Whatever be its disabilities the only grounds you have for your condemnation are those which itself supplies. To subdue reason you must employ reason. Arguments which set aside reasoning on any grounds are themselves reasonings. Nor is there anything to take its place. . . .

Innumerable attempts have been made, in the interests of the spiritual life, to find a substitute for reason, to discover another than the intellectual path to the sanctuary, an inner way. Reason may, indeed, itself acknowledge that there are regions beyond its powers of exploration, veils it cannot lift, and that knowledge may reach us by channels other than its own. The heart, as Pascal said, has reasons of its own. Yes indeed, but every heart has its private and incommunicable secrets. There is no common ground. And here we perceive the intellect's grand prerogative and advantage. And remember its magnificent hospitality. Reason keeps an open house for all comers. It introduces us to a noble partnership. As men who speak the same language can communicate with each other, so in her domain mind answers to mind. Here we can come to an understanding with each other, exchange opinions, correct each other's errors, have our eyes opened. . . . The reason is its own

protector. Nor need we doubt that its present powers may expand, that they are prophetic of higher powers to come.

The universe slumbers in the soul, and we awake to it day by day. In proportion as we come to know it we come to know ourselves. (*The Human Situation*.)

In her essay on "Human Personality," Simone Weil developed the same theme as Emerson:

When the infliction of evil provokes a cry of sorrowful surprise from the depth of the soul, it is not a personal thing. Injury to the personality and its desires is not sufficient to evoke it, but only and always the sense of contact with injustice through pain. . . . So far from its being his person, what is sacred in a human being is the impersonal in him.

When science, art, literature, and philosophy are simply the manifestation of personality they are on a level where glorious and dazzling achievements are possible, which can make a man's name live for thousands of years. But above this level, far above, separated by an abyss, is the level where the highest things are achieved. These things are essentially anonymous.

It is pure chance whether the means of those who reach this level are preserved or lost; even when they are remembered they have become anonymous. . . . What is sacred in science is truth; what is sacred in art is beauty. Truth and beauty are impersonal. All this is too obvious. . . .

Every man who has once touched the level of the impersonal is charged with a responsibility towards all human beings; to safeguard, not their persons, but whatever frail potentialities are hidden within them for passing over to the impersonal.

The labor she speaks of is the awakening in humans of the inherent, universal mind.

REVIEW

ONE KIND OF LIBERATION

IN *The Supreme Koan* (Crossroad, 1982, \$12.95), Frederick Franck continues his dialectical engagement with Buddhism and Christianity, beginning with some fragments of autobiography, offering mystery plays, his own and some others, and ending with reflections of which the following is an example:

As if to compensate for all the neobarbarity and the resuscitated old beastliness, a mystical awareness is arising in our time which seems unparalleled since those earlier Dark ages. Sometimes one suspects that Joachim of Floris's prophecy may be close to being fulfilled. This thirteenth-century abbot saw time ahead which would not only witness the dissolution of institutional Christianity, but the dawning of an era in which the Holy Spirit would speak to the human heart directly without the need for ecclesiastical middle men.

Only a very short time ago, all that could be called "religion" had an aura of obsolescence and neurosis. In the last ten years there has been a sea change. After Vietnam and the disasters that followed, we have lost some of our conceits. Not only are we no longer so uniformly boastful of inhabiting God's own country, but we have lost all illusions about glorious button-pressing utopias just around the corner. All delusions of limitless progress by now seem to have evaporated a very long time ago. Our conception of the redemption of humanity by means of technological magic and gadgets has collapsed.

Technology, of course, cannot redeem anything, but here Dr. Franck seems to suggest that, until lately, we have had no idea that we might be in need of redemption. And with that realization—or suspicion—the faith in technology has waned. As he says:

Curiously, the idea of redemption, liberation, awakening has, as such, assumed a new urgency and a new meaning, as if we were becoming aware that salvation might be that from our most destructive obsessions: liberation from our immense folly and suicidal callousness, a waking-up to the nihilistic nightmare of antivalues that dominates our world and which threatens our survival. We might just be recovering an awareness of our human condition that wonder and awe that are at the wellspring of all religion.

...

Early in this book, Dr. Franck quotes from a Chinese sage of the seventeenth century, T'sai Ken Ten, who said: "When a man has reached highest perfection, it is nothing special, it is his normal condition." This seems sublime common sense, and also a completion of the truth hinted at by Ortega y Gasset in "The Self and the Other," and by Theodore Roszak in *Unfinished Animal*.

Another useful suggestion:

That so many now turn East in their search for a spiritual home in the wasteland should not be mistaken for a mere fad. We are the generation that has ham and eggs for breakfast, sushi for lunch, and Madras curry for dinner. We are no longer living in isolated cultural ghettos where faith was locked in presuppositions and axioms shared by all within the walls. We are not like the ancient Hebrews, for whom Yahweh as the image of the divine was part of the tribal cultural system, far beyond all doubt, let alone rejection. If not politically, at any rate gastronomically the world is fast becoming a single continent. We find our home where the heart feels at ease. Convergences, parallelisms, isomorphisms in religious phenomena have become inescapable. In the realization of these convergences a new image of the Human seems to hover above the maelstrom of contemporary nihilism and cynicism. . . .

But is "image" the right word? An image is a kind of "print," while man is rather the printer, the noumenon, the subject. Dr. Franck seems quite aware of this in a concluding passage on the all-too-familiar Hinayana doctrine of "anatta"—meaning "no soul," "no Atma." He says:

The ego to be "overcome" is the delusional objectification of, and clinging to, the ever-changing, ephemeral, separate ego, as if it were an absolute and autonomous. . . . Buddhism does not deny the person so much, as it points to the need for its transformation to the True Self, where ego finds its actual place in the fabric of the divine Whole. . . . Loose talk about the "destruction" of ego is a semantic trap: ego needs neither to be destroyed nor glorified, it must only not be clung to. It must be "seen into," relativized, if we are to be in contact with our true nature.

Our true nature, then, is the Universal Self, sometimes called the Divine Ground, individualized in the *Bodhisattva*, no matter what the logicians are able to say.

MANAS does not review poetry, but reviewers sometimes quote it, and Dr. Franck's expression, "the nihilistic nightmare of antivalues" has illustration by Myles Greene (Greenview Publications, Box 7051, Chicago, Ill. 60680). On page one of *Circa* 1968 there are these lines on "Modern Life":

You rib me
 then aid me
 by offering alms
 Your sociologist
 kicks my shins
 then recommends group therapy
 to alleviate the pain
 You send me to jail
 by your perjured testimony
 then send me
 candy and cigarettes
 You reduce my emotions
 to stimulation
 of erogenous zones
 a medical problem to be
 diagnosed
 . . .
 You strangle me
 with
 sensitivity
 maturity
 therapy
 mere words from a dynamic vocabulary
 that weights me down
 into a hell
 of therapeutic choosing
 Your soul is man-made
 a manufactured dictionary
 . . .
 You explain
 the unexplainable
 you study the savage
 whose worst behavior
 you adopt
 you claim to be sensitive
 but so is a tuning fork
 your tantrums and traumas
 show no feelings
 The worst of establishment
 communism
 fascism
 you duplicate
 with a social totalitarianism
 of mindless word machine
 of feelingless dynamics and
 functioning
 of moronic emotions
 a fungus
 that grows on just one side
 of the tree of life
 away from the Light.

We have a little more poetry, selected by Lucy Dougall as part of the content of her *War and Peace in Literature* (World Without War Publications, 67 E. Madison, Suite 1417, Chicago, Ill. 60603—\$5.00). We don't know what to say about the rest of this bibliography, made of brief summaries of a miscellany of what seem good books, but Kenneth Boulding is of the opinion that the summaries are "extraordinarily helpful." The poetry, however, which comes from all places and all times, speaks for itself.

From Stephen Crane's "War Is Kind":

Swift blazing flag of the regiment,
 Eagle with crest of red and gold,
 These men were born to drill and die.
 Point for them the virtue of slaughter,
 Make plain to them the excellence of killing
 And a field where a thousand corpses lie.

From Randall Jarrell:

Six miles from earth, loosed from its dream of life,
 I woke to black flak and the nightmare fighters.
 When I died they washed me out of the turret with
 a hose.

From Thomas Hardy:

Yes; quaint and curious war is!
 You shoot a fellow down
 You'd treat if met where any bar is
 Or help to half a crown.

And Marianne Moore:

There never was a war that was
 not inward, I must
 fight till I have conquered in myself what
 causes war, but I would not believe it.

When, one wonders, will such songs again
 exercise the might they possess?

COMMENTARY

HELP FROM GEOMETRY

SINCE the nature or function of self-consciousness is considered in both the lead article and Review, it seems appropriate to quote a brief passage on the subject by a nineteenth-century Theosophist, William Q. Judge, who provided a suggestive resolution of the paradoxes involved. Using the Leibnizian term, "Monad," to represent the unit of awareness, he wrote (in the *Path*, the magazine he edited, for February, 1882):

Consciousness is a condition of the monad as the result of embodiment in matter and the dwelling in a physical form. Self-consciousness, which from the animal plane looking upward is the beginning of perfection, from the divine plane looking downward is the perfection of selfishness and the curse of separateness. It is the "world of illusion" that man has created for himself. "Maya is the perceptive faculty of every Ego which considers itself a Unit, separate from and independent of the One Infinite and Eternal Sat or 'be-ness'." The "eternal pilgrim" must therefore mount higher, and flee from the plane of self-consciousness it has struggled so hard to reach.

A metaphysical puzzle or enigma is plainly involved here. How can a "unit" which is said to be one with the universal self have individual consciousness? How can there be a self unless there is also the "other" to be distinguished from the self? How is it possible for the unit to be *both* individually and universally aware?

Another nineteenth-century writer, Theodore Merz, got at this apparent contradiction by using a geometrical analogy. In his *Leibnitz*, Merz says that the philosopher could not tolerate the assumption that "matter was composed of a finite number of very small parts."

His mathematical mind forced him to carry out the argument *in infinitum*. And what became of the atoms then? They lost their extension and they retained only their property of resistance; they were the centers of force. They were reduced to mathematical points. . . . but if their extension in space was nothing, *so much fuller was their inner life*. Assuming the inner existence, such as that of the human mind, is a new dimension, not a geometrical

but a metaphysical dimension. . . . having reduced the geometrical extension of the atoms to nothing, Leibnitz endowed them with an infinite extension in the direction of their metaphysical dimension. After having lost sight of them in the world of space, the mind has, as it were, to dive into a metaphysical world to find and grasp the real essence of what appears in space merely as a mathematical point. . . . As a cone stands on its point, or a perpendicular straight line cuts a horizontal plane only in one mathematical point, but may extend indefinitely in height and depth, so the essences *of things real* have only a punctual existence in this physical world of space, but have an infinite depth of inner life in the metaphysical world of thought. . . .

Here, the "point" represents our personal awareness in the material world where both things and human centers of consciousness are separate and distinct. Yet every point broadens to infinity, and therefore unity, in the depth of its ultimate extension.

This geometrical image provides parallels to our psychological experience. We know that there are various stages of unity—relative unity—in our relations with others. The uniting principle, we might say, is love, by which we *feel* our unity in various extensions. Again paradoxically, our feeling of unity grows as we look within, putting aside the distances which divide us from one another. The more we understand ourselves, even our distinctive individuality, the more we sense our oneness with others: we recognize the *depth* of others, instead of their punctual or finite existence.

Or, as Macneile Dixon says: "The universe slumbers in the soul, and we awake to it day by day. In proportion as we come to know it we come to know ourselves." An eastern philosopher uses other words: Nirvana is knowledge of Samsara—of the sea of conditioned existence in all its temporal confusion.

CHILDREN

. . . and Ourselves

A SELF-TAUGHT TEACHER

THE work of the independent thinker is not only to lay the foundation for new institutions; it is also the task of dissolving old institutions. This is not a contradiction in terms, but a way of explaining that serious thought is always independent of institutions, which became the crutches and rigidities of civilization as well as its guideposts and shapers. In a pleasantly optimistic volume, *The Independent Scholar's Handbook* (Addison-Wesley, 1982, \$8.95), Ronald Gross provides "case histories" of the work of individuals who are doing their part in dissolving the authority of present-day institutions, and often turning their labors into a personal success. Focusing on the area of scholarship, the author says in his introduction:

While independent scholars have always existed—indeed, as I will contend below, have been the mainstream of Western culture—their widespread visibility perhaps had to await the arrival of a largely college-educated population, including many people with strong intellectual interests sparked by their higher education. It had to await the widespread availability of quality paperback books, of a vast repertoire of musical masterpieces readily available on records and tapes, of access to cultural experiences made accessible through cheap and convenient means of transportation. It had to await an era in which personal aspirations of Americans would begin to turn away from material acquisitions, toward the cultivation of inner resources. . . .

Now, as the lights dim in the universities and much of the most exciting intellectual activity goes on outside of academe, the time seems to be right to recognize, celebrate, and encourage independent scholarship. Fresh thinking and more broadly based research and experimentation is needed in virtually every field.

There is, however, in such a time, a price exacted from original work and expressions of protest. Precisely because the mass culture affords works of excellence along with run-of-the-mill material, a certain homogenization may result.

Herbert Marcuse pointed out (in *One-Dimensional Man*) that the authentically critical works often acquire a kind of "entertainment" value because mass media editors are confident that no "real" change can any longer take place. As Marcuse puts it:

What has been invalidated is their subversive force, their destructive content—their truth. In this transformation, they find their home in everyday living. The alien and the alienating *oeuvres* of intellectual culture become familiar goods and services. . . . In the realm of culture, the new totalitarianism manifests itself precisely in a harmonizing pluralism where the most contradictory works and truths peacefully coexist in indifference.

Another aspect of this dehorning process is described by Harold Rosenberg in *The Tradition of the New*, in a passage describing what happens to the work of the innovator:

In no case does the founder of a method determine the use to which it shall be put by the profession nor what the public shall be told it means—as against the practitioner chiefs who head the university departments and professional associations, the influence of a Freud or an Einstein has been negligible, and the same is the case, of course, with the innovator in the arts. He is doomed to isolation by the very processes through which his work reaches society. The larger the part played by his creation in the profession, the less need there is to understand it, and the greater grows the distance between his idea and the influences exerted by his work. The more widely he is known to the public the greater the misinterpretation and fantasy built upon his name and the greater the distance between himself and his social existence. The famous "alienation of the artist" is the result not of the absence of interest of society in the artist's work but of the potential interest of *all* of society in it. A work not made but "sold" to the totality of the public would be a work totally taken away from its creator and totally falsified.

Fortunately, the language of these critics is the language of extremes. There is always good work which gets by these hazards and is in larger outline understood by a wide public—E. F. Schumacher's contribution being an example. A cost-benefit analysis of his popularity would certainly come down on the side of benefit, even

though all sorts of exaggerations and simplifications are easily found. Murray Bookchin is a present-day critic who continues the warnings found in both Marcuse and Rosenberg.

In some cases the triumph of autodidacts (self-taught thinkers) becomes possible mainly because of the decline of institutions. This seems clear from Ronald Gross's account of an educational activity in Bangladesh:

Halfway around the world, another vista of intellectual barrenness and potential opened before me. I had been dispatched by the United Nations Children's Fund to observe innovative programs in the Far East, specifically in that nation generally regarded as the world's worst "basket case": Bangladesh. The last thing I expected to encounter in a nation with 80 percent illiteracy, grievous problems of survival, and a decimated culture was a lesson in independent scholarship. . . . the speaker was Naresh Chakraborty, a self-taught social reformer who is championing the boldest ideas in community development in one of the world's least developed nations. . . . We tramped around the grounds of his school at Rudrupur, which has earned the sobriquet "miracle school" among Third World educators. As we walked and watched the students farming, running the school store, and making tools, Chakraborty . . . expounded his quietly astonishing educational philosophy.

He began by confessing his lack of "proper" training for what he was doing with such evident success. "There is a dearth of books in Bangladesh, so even if one has the time to learn, one lacks the resources. For example, my first awareness of principles of progressive education came when I visited one of our few teacher training institutes and saw a wall chart summarizing in two sentences some of the key ideas of Socrates, Rousseau, Montessori, Dewey. Those sentences resonated with my experience of how students learn. . . . if those masters could find their own way, just by working with children and their parents and *thinking* about what they were seeing, then each of us can, too.

"Each person has a natural urge to learn," he explained at one point. "Awakening that urge is the function of the schoolmaster and teacher. That is what we try to do here at the school." . . . Chakraborty has suffered the familiar fate of a prophet in his own country. For seventeen years government bureaucrats have ignored or rejected his

ideas, forcing him to call the most enlightened part of the program at his school "the extracurriculum." All schools in the country must follow the government-ordained conventional syllabus which is largely irrelevant to the current and future real needs of students.

When it came time to take my leave from Naresh, both of us knowing that it was unlikely we would ever see one another again, I expressed concern for his safety. He had been arrested recently on suspicion of carrying a gun, but his opponents had backed off at his spirited defense that "education is my only weapon."

Well, while one may mourn the fact that the educational authorities of Bangladesh ignore Chakraborty's contribution, there is the consolation that an Indian writer, noting the movement to incorporate Gandhian teachings in the university curriculum, pleaded that this not be done. The best way to kill the Gandhian inspiration, he said, would be to subject it to academic treatment.

FRONTIERS

Some Common Dilemmas

A CALIFORNIA reader writes in comment on a question raised in our editorial in the Sept. 15 issue. After speaking of those who embody the conscience of our society—who don't have to be pushed into positions and attitudes responsibility, but adopt them naturally—the editorial writer asked: "Why aren't more people like that?" Our reader responds:

After several hours of thought (more, actually, over many years) I believe that the answer to this question is directly connected with who we think we are, both individually and in a social sense. (I can't claim too much originality for this conclusion.) If we believe we are primarily flesh and bones (i.e., we are our bodies) then it almost naturally follows that one should maximize his or her own personal gains. Furthermore, such persons (virtually everyone alive in America today?) see no value in "responsible" thinking, spiritual inquiries or altruistic endeavor. It is only when the assumptions that support our world are no longer tenable that most people are forced to re-examine the pattern of their lives and their underlying and spiritual beliefs. I suspect this is somewhat analogous to what scientists must do when their laws no longer adequately describe "reality," as Thomas Kuhn has detailed [in *The Structure of Scientific Revolutions*] although Kuhn claims that actually the "older" scientists die out and the ones with newer (more accurate) views replace them. This may have to happen to our civilization when some of the impending crises visible today become overwhelming. If one is optimistic then one may hope that as such crises become more widespread (i.e., affect many of the rich countries and the rich in these countries), enough people are able to formulate sane alternatives (to inevitable widespread death and destruction).

If, then, such alternatives can be accepted and acted upon wisely, there is at least reason to hope that humanity may survive by reaching a higher level of evolution (or consciousness). Of course, this is no justification for waiting until the worst happens! I suspect that sooner or later we will learn enough about who we are, and why we are "here," to survive, or we won't survive: cosmic survival of the fittest.

What, one wonders, are the psycho-dynamics of "reaching a higher level" of evolution (or

consciousness)? Would this be a collective or an individual process? What would be the interplay between the individual and society in such a development? Should we take into account the treatment accorded Jesus, and before him Socrates?

This is a consideration that ought to have attention when the goal of "turning society around" is proposed.

Since our reader is an engineer, we might recall what happened to various individuals in this profession when they dared to question the policies (or products) of the firms they were working for. With hardly an exception, they lost or resigned from their jobs.

For our reader this is a substantial question.

On a more personal note . . . I am facing some of these concerns today as I search for a job as an engineer. As you may know, there are many jobs for scientific and technical people in weapons-related work . . . and darned few (in the San Francisco Bay area) in other sectors. I currently work at a research center for a contractor and perform flight simulation tests on (military) aircraft. It certainly was not my dream. job, but I had ended my schooling hoping to find work in the energy and environment area. Several hundred resumes sent locally and across the country produced no results. Once again I am looking, but the situation remains the same—there are many jobs in defense contracting and precious little else.

I have begun to ask myself fundamental questions such as: "Is engineering and science as taught and practiced today a wise and humane endeavor?" Are weapons and other very complicated products the major outputs of our technology? Does specialization in science technology ultimately lead to alienation? Can military research be justified on a personal basis? Under what circumstances? What would a more enlightened science and technology be like?

How can I "earn a living" doing some responsible kind of scientific or technical work? (I enjoy analytical thinking and am reasonably good at it.) Can there be a more permanent type of technical knowledge that is not outmoded by new generations?

These are questions by no means limited to engineering science. There are stock brokers asking them, and people in the food business. Earlier this year (May 26) we took notice of an article by James Turner, author of *The Chemical Feast* (Grossman, 1970), a book devoted to the problems, frustrations, and inadequacy of the Food and Drug Administration. Turner wrote in *Renewal* (for Feb. 8)

. . . as soon as *The Chemical Feast* was published one of the things that intrigued me was how many corporate people called me and wanted to pursue issues raised in the book. I argued strongly that I should be permitted to pursue these dialogues, and I did . . . What intrigued me about talking to these corporate guys was I was now getting a practical analogue to reinforce my notion that the evil in the world is not being done by evil people. The corporate guys told me all about *their* problems, what they were up against, what they could and couldn't do. The real problem in the world is not us-against-them but us against *it*: the people against this tightly-knit series of cubicles that everyone gets trapped inside of.

So, you start thinking, not about how to get out of the cubicles with a whole or maybe half a skin, but about how and why people get into them in the first place. Well, we know the answer to that. They need to eat, they want to marry and have children. And everybody else is doing it. But there have been rather remarkable people—a few—who never let themselves be trapped. For an example we go back to engineering and suggest a reading of two books by Arthur Morgan—*Dams and Other Disasters* (Porter Sargent, 1971) and *The Making of TVA* (Prometheus Books, 1974) both somewhat autobiographical. Almost from the beginning, Morgan chose his jobs. Then, as a professional engineer, he chose his clients. When he took a calculated risk (as we all must sometimes do) that turned out badly, he found other arrangements that were less offensive to his principles. He planned those arrangements in advance, just in case. . . . He called this way of planning "The Economic Basis of Idealism."

Unhappily, most of the stories dealing with persons who practice their ideals are about eminent people who were free to make their own decisions. But one can still learn from them—learn that the freedom to choose, in this world at least, must always be earned. We suggest reading Morgan because his writings describe the long, slow process by which he made himself free. (Best of all is a book put together by his wife, Lucy Morgan, called *Finding his World*, published in Yellow Springs, Ohio, in 1928, by Kahoe & Co. Like some other very good books, it has been out of print for years.)