MATERIAL FOR FOUNDATIONS

IT is both encouraging and perturbing to discover that the very foundations of human thought concerning what is real or true may undergo great changes. The modern world now seems to be in the midst of such a transition, with the result that the air is filled with both extravagant hopes and anxious warnings, along with serious attempts at hard reasoning on new assumptions. There are also reflective inventories comparing new and old currents of thought, with some account of the clashes between them.

One clear effect of this change is the fact that certain ways of thinking which have been conventionally—automatically—rejected by the reigning authorities are rapidly gaining respectability. Such thinking cannot be stopped; it is bound to go on, since it seems in the very grain of human life as numerous people are now beginning to regard it. Apart from the question of whether one should "join in" with this current of thinking, share its enthusiasms, and seek for a science compatible with the direction of its ideas, there may be a more important inquiry: What do such basic changes mean, wherever they take us? Does the transition itself reveal anything about human beings? For the fact is that until about ten years ago, hardly anyone would have admitted that so profound an alteration in the human outlook could even take place.

A dramatic example is the extreme contrast between now reviving ancient (myth-based) ideas about death and the attitudes which have prevailed in Western civilization until very recently. In his *Essay on Man*, Ernst Cassirer wrote:

Many mythic tales are concerned with the origin of death. The conception that man is mortal, by his nature and essence, seems to be entirely alien to mythical and primitive religious thought. In this regard there is a striking difference between the mythical belief in immortality and all the later forms

of a pure philosophical belief. If we read Plato's Phaedo we feel the whole effort of philosophical thought to give clear and irrefutable proof of the immortality of the soul. In mythical thought, the case is quite different. Here the burden of proof always lies on the opposite side. If anything is in need of proof it is not the fact of immortality but the fact of death. In a certain sense the whole of mythical thought may be interpreted as a constant and obstinate negation of the phenomenon of death. By virtue of this connection of the unbroken unity and continuity of life, myth has to clear away this Primitive religion is perhaps the phenomenon. strongest and most energetic affirmation of life that we find in human culture.

How would we, or most of us, have reacted to this affirmation, say, twenty years ago? We might have found it fanciful indeed. people, we might have concluded, were like gullible children. They preferred wonderful fairy tales to the facts of life. They had no science, not even a suspicion that there might be systematic discovery of the way the world works. They believed what their shamans told them and were guided by longings for release from misfortune and earthly woes. They accepted that death is the illusion, not immortality. How, we muse, could any one have believed this, with death striking all around them? We—we would say to ourselves are sensible, tough-minded people, preparing to live in a brave new world.

Why has this "modern" position been so thoroughly shaken in the present? Why is there so much less stubborn resistance to "mythology"? Well, for one thing, skepticism and denial of soul don't make the kind of sense we are looking for today. Our deepest feelings about the roots of life and the sources of truth have changed, or are in the process of change.

It is not unaccustomed "pushing" in any direction to take note of this broad fact, nor to illustrate the depth of the change in some of the most articulate members of our generation. We have a few examples. One eminent writer, Saul Bellow, speaks (in *Critical Inquiry*, Autumn, 1975) of the impoverishment of the human imagination by modern rejection of any "spiritual" reality. He declares his own independence—as had Tolstoy and Camus before him—of the enslavements resulting from this view:

Since 1914, in all spheres of life, crisis has ruled over us, survival anxiety has become permanent with us, and public unrest has been set into our souls. To be free from this would indeed be wonderful. It would mean nothing less than the restoration or recreation of culture. Indispensable to such a restoration is the recovery of significant space by the individual, the re-establishment of a region about every person through which events must make their approach, a space in which they can be received on decent terms, intelligently, comprehensively, and contemplatively. At a time when we are wildly distracted and asking ourselves what will happen when the end will come, how long we can bear it. why we should bear it, these notions of culture and significant space may seem hopelessly naive. But for art and literature there is no choice. If there is no significant space there is no judgment, no freedom, we determine nothing for ourselves individually. The destruction of significant space, the destruction of the individual, for that is what it amounts to, leaves us helplessly in the public sphere. Then to say that the world is too much with us is meaningless for there is no longer any us. The world is everything. But it is apparently in the nature of the creature to resist the world's triumph. It is from this resistance that we infer truth to be one of his vital needs. And he has many ways of knowing the truth. If not all of these ways can be certified by our present methods, so much the worse for those present methods of certification.

How is this related to the question of immortality—an idea Saul Bellow does not mention? In consequence of the modern view, he says, the world is everything, the individual nothing. He is saying that even our mortal life has been reduced to a cipher. This could not happen among a people filled with the conviction that man is both mortal and immortal.

Mr. Bellow is describing the fulfillment of a much-misunderstood prophecy by Nietzsche.

Speaking of the change from mythic and metaphysical understanding to the positivist and scientific view, Hannah Arendt joins with Nietzsche, illuminating his claim that "God is dead":

What has come to an end is the basic distinction between the sensual and the supersensual together with the notion, at least as old as Parmenides, that whatever is not given to the senses—God or Being or the First Principles and Causes (archai) or the Ideas—is more real, more truthful, more meaningful than what appears, that is not just beyond sense perception but above the world of the senses. What is "dead" is not only the localization of such "eternal truths" but the distinction itself. . . . The sensual, as still understood by the positivist, cannot survive the death of the supersensual. No one knew this better than Nietzsche who, with his poetic and metaphoric description of the assassination of God in Zarathustra, has caused so much confusion in these matters. In a significant passage in The Twilight of Idols, he clarifies what the word meant in It was merely a symbol for the Zarathustra. supersensual realm as understood by metaphysics; he now uses instead of God the words true world and says: "We have abolished the true world. What has remained? The apparent one perhaps? Oh no! With the true world we have also abolished the apparent one." . . .

In other words, once the always precarious balance between the two worlds is lost, no matter whether "the true world" abolishes the "apparent one" or vice versa, the whole framework of references, in which thinking was used to orient itself, breaks down. In these terms, nothing seems to make sense any more.

And *that*, surely, is why the "apparent world" of the senses—which we have been told by the modern intelligence is the only one there is—is no longer acceptable as sole reality. It, too, has broken down. It is no longer a fit place for human beings. Mr. Bellow does not argue for immortality but for a world consistent with immortality, a world in which it is not denied and made impossible by the alleged nature of things.

There is in human beings, we are now discovering, a deep and abiding need for a superphysical or supersensuous world. The

ancients, as Cassirer shows, felt this, or knew it, and saturated the mind of their times with myths declaring its prior reality, even as Parmenides maintained. The splendor, heroic temper, and moral genius of the ancients subsisted on this conviction, giving in generous proportion to the individual the "significant space" which Saul Bellow declares we must have to remain human. Cassirer also spoke of the difference between the vast "affirmation" of immortality in myth and the Platonic "proofs" that the soul does not die. This was a great change in antiquity, marking, perhaps, its end. What sort of change? Well, Plato stands for the dawn of rationalism in the West. He has Socrates reason about things. While Socrates claimed to "affirm" nothing, he wanted to reason about everything, or a very great deal.

One way to get at the essential beliefs of an age is to take note of what its leaders or spokesmen regard as needing to be proved. What is self-evident requires no proof—no one will argue about that. The myth-makers, apparently, felt that immortality needed no proof. *Of course* we are immortal souls! How ridiculous, they said, to suppose otherwise! But death presented certain misleading appearances, so they reasoned to show the illusory character of death, arguing against its reality.

But in Plato's time, the awakening intellect of the Greeks was paying more attention to sense perceptions than to mythic tradition. They were making "progress," as we say, or used to say. So Plato, understanding the deep inner need of human beings to retain feelings of reality for an invisible world, gave reasons for believing that the soul is the true being. This couldn't be taken for granted any more. The claim had to be defended.

We can't say that Plato won his argument about the soul. He convinced a few, but, after the interim of the Dark Ages the thought of the West awoke to move in the opposite direction. Yet distinguished Platonists kept going the argument for the reality of the soul throughout the birth of the Enlightenment, maintaining the thread of

affirmation. A great seventeenth-century champion of the mythic outlook, the Platonic claim—and now the increasingly heard postmodern claim—was Sir Thomas Browne, who said in *Religio Medici*:

Thus is man the great and true amphibium, whose nature is disposed to live not only like other creatures in divers elements, but in divided and distinguished worlds: for though there be but one world to sense, there are two to reason; the one visible, the other invisible. . . .

The cry of today's two-worlders is often wonderfully lyrical, along with its reasoned argument and deep insistence on inward human necessity. These feelings we have, it is said, are not just "notions," but the voice of our authentic selves. Thus Annie Dillard, poet and essayist, has declared herself at an intolerable crossroads. How can she make the world of the scientists, or even the world of the senses, in all its beauty and cunning splendors, into a place hospitable to the moral longings of human beings? She sees the world of the senses, but *feels* the invisible one. As she says in *Pilgrim at Tinker Creek*:

Look: Cock Robin may die the most gruesome of slow deaths, and nature is no less pleased; the sun comes up, the creek rolls on, the survivors still sing. I cannot feel that way about your death, nor you about mine, nor either of us about the robin's—or even the barnacles'. We value the individual supremely, and nature values him not a whit. It looks for the moment as though I might have to reject this creek life unless I want to be utterly brutalized. Is human culture with its values my only real home after all? Can it possibly be that I should have my anchorhold to the side of a library? This direction of thought brings me abruptly to a fork in the road where I stand paralyzed, unwilling to go on, for both ways lead to madness.

Either this world, my mother, is a monster, or I myself am a freak.

If the laws of this world rule, and only they, there is no real place for us here. It is a world with no human sense of meaning:

Consider the former: the world is a monster. Any three-year-old can see how unsatisfactory and clumsy is this whole business of reproducing and dying by the billions. We have not yet encountered any god who is as merciful as man who flicks a beetle over on its feet. There is not a people in the world who behaves as badly as praying mantises. But wait, you say, there is no right and wrong in nature; right and wrong is a human concept. Precisely: we are moral creatures, then, in an amoral world.

Take a logic, develop it, and see where it lands you. Annie Dillard does this, showing the insupportable contradictions in thinking limited to the logic of one world alone. She has these human feelings about cock robins, snails, and human beings. But the world of the senses has nothing at all to say to those feelings; it ignores them, splashes mud and blood all over them, grinds them under foot. What shall she do?

All right then. It is our emotions that are amiss. We are freaks, the world is fine, and let us all go have lobotomies to restore us to a natural state. We can leave the library then, go back to the creek lobotomized and live on its banks as untroubled as any muskrat or reed. You first.

This, one may say, is magnificent two-world rhetoric, even if no especially comforting answer to our questions. Yet at least some answers are implicit in Annie Dillard's book. She finds intuitive balances that seem to work. But her book is indeed a sign of the times, marking the great swing of the pendulum. The mythic consciousness is returning, picking up some Platonic logic on the way, and asserting its presence in diverse vernaculars. And if an age makes itself known by the contrast between what it affirms without fear of contradiction, and what it feels obliged to prove, then we may soon be able to outline the parameters of the emerging convictions.

The renewal of a transcendental world of reality is on the way. It is coming back in the subtle intuitions of both poets and ecologists, in the reason of a new generation of philosopheressayists. It is coming back through the attention given to a dramatic order of psychic experience, as reported in books like those of Elisabeth Kubler-Ross and Raymond Moody. How many such books does it take to change the mood of the

times? When so many people want so much to find good reason to change?

There is a popular and even a vulgar side to this change, displaying dimensions of human weakness and vulnerability as well as suggestive evidence of what may be going on at deeper levels of the psyche. In any event, the change is not at all likely to reverse itself, or even to slow down until some point of psycho-moral stability is reached. Meanwhile, because of their occupational conditioning, the intellectual classes and learned academics are for the most part pretty far behind. We have been quoting pioneers, not the rank and file.

What would a Plato have to say about the present scene? Well, what did Plato do in his own time? He reasoned as few men have been able to reason since. He also turned myth into an art form, weaving his reasoning around it, then using myth to relieve the pressure of the dialectic on the strained and tiring minds of his hearers or readers.

Our world, in contrast, is habituated to go to the facts, the facts, the facts, for relief from abstract speculation and from the ineffectuality of bloodless academic "idealism." Plato in the round, Plato as an "idealist" who believed that the ideal is the *real*, was far too bold for modern scholars. Convinced that he was just guessing or playing around, they assumed his idealism had no more substance than their own. Seeking a safe irresponsibility, they reduced his ideas to plausible abstractions, making his thinking like their own. In this way philosophic ideas were divorced from the moral obligations of *life*.

Plato was not that sort of "academic." His Academy was meant for better things, more humanly serviceable things. Plato taught that the soul is real, that it has potential divinity and moves in its highest mode toward wisdom and justice; and he taught that the care of the soul is the primary business of life. The life of the soul meant more to Plato than the fortunes of the body. The cycle of rebirth contained the meaning he sought, not the entropic disaster signified by physical

death. The world and the body are themselves but works of the mind, he said, and the real thing is the mind and the soul, not the works, which are born to die and come and go. "Men," a philosophic historian has said, "in proportion to their intellect, have admitted his [Plato's] transcendent claims," but as a nineteenth-century thinker added, "his commentators, almost with one consent, shrink from every passage which implies that his metaphysics are based on a solid foundation, and not on ideal conceptions."

What the world needs most, in time of great intellectual and moral transition, is an inquiring philosophy which has solid foundations. The "facts" of the change are already coming along faster than we can assimilate them. The underlying revolution in thought has set brush fires of controversial assumption and belief in almost every quarter. We are pressed by life to "take a position" before we have time to make up our minds.

How can we be sure? What might be for us a The question seems to "solid foundation"? neglect the fact that, as in building a house, we have to make our own. Structures of meaning are without exception erected on works of the imagination. One chooses the materials for a solid foundation. The responsibility is unaccustomed and great. Meanwhile, quite properly, we don't much like being pushed or pulled in any direction. We want a free choice, based on as much "objectivity" as we can get. But curiously, the best writers on possible foundations are not disengaged and stationary observers. They are men in motion, minds with destinations. They have adopted convictions and are working them through. "How odd it is," exclaimed Darwin, "that anyone should not see that all observation must be for or against some view, if it is to be of any service."

A work on immortality—one which collects the thought of its most eminent advocates, believers, and defenders—is Reincarnation: The Phoenix Fire Mystery (Crown, 1977), by Joseph

Head and S. L. Cranston. This anthology presents the thinking of people who have taken a position on the question—ranging from mythic to modern times. Readers of this book may become less fearful of constructing their own foundations. Some of the contributors began with stubborn daring, and a degree of apprehension, but found a ground that gave them wonder and delight.

REVIEW ISLAND DRAMA

HUMAN attitudes toward practical the attainments of primitive peoples seem to change more from the ups and downs of our own times than from actual knowledge of past. We began by thinking of them as benighted heathen, needing our help to find their way to the pleasures and refinements of civilization. Then, as we grew uncertain as to the virtues of our age, the primitives increased in stature. We noticed that they knew how to do things which sometimes came astonishingly close to our own high skills as navigators, for instance.

In the 1940s Thor Heyerdahl and a daring crew set out on a balsa wood raft to prove to all the world that the ancient Peruvians were good to reach Polynesian enough seamen the archipelago, some of them, he said, settling on Easter Island, where they erected statues similar to those which may be seen on the Andes plateau. Heyerdahl sailed forty-one hundred miles on his raft, settling the question of the origin of the Polynesians at least in his own mind, and recording the navigating adventure in Kon-Tiki, a book named for a legendary godlike leader of both the Peruvians and the Polynesians. In any event, he proved that such migrations were possible. And the mood of his investigations is evident from his remark that "Easter Island has become one of the foremost symbols in the insoluble mysteries of antiquity." After some description of the statues, he asked: "What did it all mean, and what kind of mechanical knowledge had the vanished architects who had mastered problems great enough for the foremost engineers of today!"

We move, in short, from incidental and condescending curiosity to respect, and then to wonder. Meanwhile, among the scientists, the cultural anthropologists begin to look more carefully at the range of "primitive" accomplishments, with the result that books like Lévi-Strauss's *The Savage Mind* are published, in

which there may seem an implicit question: What else did those people know—things that we are ignorant of or have forgotten? The study of their minds becomes intense. In *East Is a Big Bird* (Harvard University Press, 1970), Thomas Gladwyn tells how he spent many months on an atoll in the Caroline Islands, learning the art of navigation as practiced by the islanders, and observing the way—practically a rite—they built their great canoes. (This book contains both photographs of boat construction and sky maps showing the scheme of astronomy by which they sailed.)

An extraordinary man of our time, R. Buckminster Fuller, enriched both the longing and the intensity of our wonder about the Polynesian mariners. In his *New Yorker* profile of Fuller (Jan. 8, 1966), Calvin Tomkins tells of the inventor's friendship with a New Zealander Maori who happened to be both an anthropologist and Keeper of the Chants of the Maori race. Since these chants amount to an oral history of the Maoris, going back for more than fifty generations, Fuller declared to his friend that they ought to be taped for the improvement of human knowledge. The Keeper objected, explaining that the chants could be explained only to fellow Maoris. The result:

Fuller thereupon launched into an extensive monologue. It was buttressed at every point by seemingly irrefutable data on tides, prevailing winds, boat design, mathematics, archaeology, architecture, and religion, and the gist of it was that the Maoris had been among the first peoples to discover the principles of celestial navigation, that they had found a way of sailing around the world from their base in the South Seas, and that they had done so a long, long time before any such voyages were commonly believed to have been made—at least ten thousand years ago, in fact. In conclusion, Fuller explained, with a straight face, that he himself had been a Maori, a few generations before the earliest chant, and that he had sailed off into the seas one day, lacking the navigational lore that gradually worked its way into the chants, and had been unable to find his way back, so that he had a personal interest in seeing that the chants got recorded. We have Fuller's assurance that the anthropologist is now engaged in

recording all the chants, together with their English translations.

With such unfolding possibilities in the air, it is not in the least remarkable that Morris West, one of the good storytellers of our time, has written a tale of island adventure called The Navigator (Pocketbook) based on the mystique of Polynesian lore. The hero is Gunnar Thorkild, a thirty-three-year-old assistant professor in Pacific Ethnography, a man with full knowledge of Polynesian dialects and the legends of the islands, and one who, having a Polynesian grandfather, has mastered Polynesian navigation and written a handbook about it, including the Cult of the Navigator. Determined to vindicate the claim of his Navigator grandfather that a lost island existed where a long succession of Navigators have gone at the end of their lives, to die in serene isolation, Thorkild recruits a crew and involves a crusty old millionaire who buys the needed vessel.

This company of adventure-seekers sets out, piloted by Thorkild's grandfather. The crew is multi-racial and includes both sexes—scholars and scientists as well as practical seamen—and when the mischance of a violent storm wrecks the ship and all are cast on the beach of the lost island, they resolve to become a proper island community. Radio lost, they will order their lives as if no rescuing expedition could ever find them.

It falls naturally to Thorkild to be the "chief." In him are joined the qualities required by Mr. West's story—he has Polynesian blood and his knowledge of island traditions is an obvious qualification for leadership, especially since the group had come together partly as an act of faith in the lore of the traditional navigators—while his Western education links the community with modern science and sophistication. By hypothesis this is a combination which should balance their lives with the best of both worlds, but tensions and doubts arise. While there is plenty of food on the island, and they have the skills to gather and prepare it, there are serious human conflicts, some with only painful solutions, and Thorkild has to

keep people working together. An old island woman, servant and companion to the millionaire, counsels him:

They don't want you mixing in their quarrels. They want you apart and different. That's the way it was in the old days. The chief didn't build boats. He made the feasts that kept the builders working. He didn't make arguments. He settled them when they were brought to him.

Use your chief's authority, she told him.

"So what do I do, Molly?"

"Step back; talk less; do less. . . . You've got to be a real chief, Kaloni; you've got to have secrets that everybody needs and nobody else knows, not even your own woman!"

He knew she was right. He could not, for the life of him, see what to do about it. All his effort, all his planning had been dedicated to the dissemination of knowledge, the sharing of skills, so that in the event of death or casualty, the skill and the knowledge would still reside in the community. Now a gossiping old woman had shown him that he was committed to a fallacy. The identity and security depended on the existence and the exercise of power. Knowledge was an instrument of power. It must be preserved, but it must be reserved also, an arcane and sacred deposit in the hands of kings, priests or This was the essence of kapu, the foundation of respect for established order. The king might die of the plague or fade gibbering into senility; but the kingship remained inviolate, because none could exercise it without the mana. In the country of the blind the one-eyed man was paramount. After every revolution they shouted for the genius who knew how to run the water supply and where the records were buried.

It was a dangerous and tendentious proposition, but perhaps less dangerous than a defective and confused scholar waving the banner of democracy over a lost island. Think about it then the exploitable mystery. God? Not here, not with this tribe. For most of them God was folklore, fantasy, allegory, a riddle without an answer. Besides, Gunnar Thorkild had no patent to proclaim redemption, lay on hands drive out spirits. . . . But he was a navigator. He dealt in time, space and motion, dimensions so simple and yet so complex that common folk abdicated them to the experts without firing a shot. Ask any average healthy red-blooded citizen to make an act of faith in

a creating, conserving deity, he would hedge, hesitate, qualify and gloss—and might well ask to have you certified. Ask him, however, to step into an aircraft, a submarine, a space capsule, and he would cheerfully risk his life, mistress or first-born, on hearsay testimony that the pilot knew his job.

Should he then invoke his "secret science" of navigation for authority to rule them for their own good? That's what he did, up to a point. No magic, but knowledge, which for some of them amounted to the same thing. How do you, indeed, keep these matters separate? To democratize the ancient tradition of the *mana*, they would all have to learn to be chiefs. Well, chiefs of a sort. So he kept shoving responsibility at them, but then needing to take it back during a crisis dangerous to all.

How does this great and longed-for transfer of authority take place not legally, as set forth in some constitution, but *actually*, as understood by the longings and utopian dreams of our hearts? Why is it so hard to see the difference between these two sorts of change—the legal and the real one—and what do you do about the laggard processes of the real change, especially when a bad wind comes up and the democrats are all just fooling around?

Thorkild suffers under this pressure:

The *mana* was not enough. The burden was intolerable. . . . Gunnar Thorkild had no god to call on, the people, with the exception of Willy and Eva, had none either. They relied, as he did, on a tangle of traditions, legends, unexamined moralities. He himself had invoked them all and found them crumbling to powder in his hand, like cere-cloths from an ancient tomb.

Yet Thorkild does pretty well. He is able to, mainly because everything happens on a small island. With an island society the novelist can focus all the essential issues in a human scale, and there can be resolutions which, while difficult, are not impossible. They are at least imaginable. No one can do this with stories about the mass society—about groups of people in the mass

society, yes, but not with social resolutions on a mass scale. The thing is impossible.

COMMENTARY COMMUNITY SELF-RELIANCE

THE people of Delta County, Colorado, have coal mines and fruit-growing agriculture, but poor local services. "It is gospel here," says the editor of the *North Fork Times* (published in Delta County), "that the county lacks an economic base and therefore can't afford services." Then he said:

This belief is held even though everyone knows that enormous amounts of money leave the county for goods, services and medical care.

In brief, our basic industries—mining and agriculture—aren't doing us the good they could because we're not holding on to the personal disposal incomes those industries generate.

This means that the people who live and work in Delta County spend their money elsewhere—in the adjoining areas of Grand Junction and Montrose Counties.

Ed Marston, the *North Fork Times* editor, figures that at least 20 million dollars, perhaps more, earned in Delta County is spent in Grand Junction and Montrose shopping centers. And now that Delta is getting a new coal mine, these stores will do even more business with people from Delta County.

How could this situation be dramatized for Delta County residents, and changes begun? Ed Marston made up an ad and ran it in the *Times*, explaining what it meant in an accompanying editorial. The ad said:

THE CITIZENS OF GRAND JUNCTION AND MONTROSE THANK THE CITIZENS OF DELTA COUNTY FOR HELPING TO

- PAVE OUR ROADS
- BUILD OUR SCHOOLS
- PROVIDE US WITH JOBS
- KEEP OUR STORES HUMMING

Decentralization and local autonomy remain mere slogans without the deliberate support of the population. Gandhi once said that if your local barber can't cut hair well enough to suit you, send him to barber school and then give him your patronage. A community good enough to earn a living in needs local support to be good enough to live in. Only the people can make it so. Self-reliance has a variety of practical meanings, and the job of a thoughtful editor is to point this out.

CHILDREN

... and Ourselves

WHAT CHILDREN CAN DO

THERE are two good reasons for reading *The Hidden Order of Art* (University of California Press, 1967) by Anton Ehrenzweig. One is what he says in his preface about children and how they learn from reading that seems much "too old" for them. (Here he is encouraging the reader not to worry too much about the unfamiliar terms he will be using.) The other reason is his discussion of pictured examples of "modern art," which somehow gets across what the artists are meaning to do, and why it may have value. One need not "like" modern art, but there is some obligation to understand it. "Liking" sometimes follows.

Since saying anything more about this seems pointless without the pictures, we quote the passage from the preface:

May I, then, ask the reader not to be irritated by the obscurity of some of the material, to take out from the book what appeals to him and leave the rest unread? In a way this kind of reading needs what I will call a syncretistic approach. Children can listen breathlessly to a tale of which they understand only little. In the words of William James, they take "flying leaps" over long stretches that elude their understanding and fasten on the few points that appeal to them. They are still able to profit from this incomplete understanding. This ability understanding-and it is an ability-may be due to their syncretistic capacity to comprehend a total structure rather than analysing single elements. Child art too goes for the total structure without bothering about analytic details. I myself seem to have preserved some of this ability. This enables me to read technical books with some profit if I am not conversant with some of the technical terms. A reader who cannot take "flying leaps" over portions of technical information which he cannot understand will become of necessity a rather narrow specialist. It is an advantage therefore to retain some of the child's syncretistic ability, in order to escape excessive specialization.

Readers of Michael Polanyi's *The Tacit Dimension* may recognize in this writer's "capacity

to comprehend a total structure" the "tacit knowing" at the foundation of Polanyi's idea of knowledge.

Another aspect of children's learning is dealt with by Milton Schwebel in the fifth seminar on *Piagetian Theory and its Implications for the Helping Professions* (we gave attention to the sixth seminar in "Children" for last Sept. 7). What Mr. Schwebel says about "mastery learning" seems immeasurably important to all parents and teachers:

"Mastery learning" whose aim is the learning of school knowledge holds promise for fundamental knowledge. Under the intellectual leadership of Carroll and especially of Bloom, the concept of mastery learning has given the most powerful evidence that virtually all children and adolescents can master the learning necessary for academic through high school and Traditionally, aptitude as applied in school means the level to which a student can learn something (a subject or a skill) in a given time frame: e.g., one week to learn long division. Those who get A's are most apt. Carroll chose to define it as the time necessary to learn it to a criterion level of mastery, that is one, two or three weeks or more to master long division. Aptitude thus becomes a measure of learning rate. Bloom transformed Carroll's conceptual model into an operational one for mastery learning. In brief, this model calls for teachers who expect success, children who want it, and instructional techniques geared to the identified needs of the individual for mastery of a given concept or skill, e.g., the division of fractions; and all the time necessary to achieve it.

At the start of a learning cycle the slowest children take five times the time taken by the brightest. This ratio is reduced with ensuing cycles and after a number of them, the ratio is reduced to 3:1. So far we are considering only elapsed classroom time. When actual time, i.e., time actively devoted to the task, is the basis for comparison, the initial ratio is 3:1, and after mastery learning conditions for about a school year, the ratio is reduced to 1.5:1 or less. The difference between elapsed time and actual time is an important one for the helping professions. We know about individual differences in getting down to work, in disciplining ourselves, in concentrating on classwork and especially on lectures. We know, however, that those who are least

interested in school are those who experience failure and who do not expect anything but failure. The virtues of mastery learning are that the teacher has reason to expect success and the child after the initial sequences experiences it. The teacher knows too that time on the task is important and can arrange the experiences in such a way as to reduce distractions and make studying more satisfying.

The significance of these findings is of many kinds. The promise is real that almost all children can master concepts and can get the accompanying feeling of success.

These annual publications of *Piagetian Theory*, edited by James Magary and others, are available from the University of California Bookstore, University Park, Los Angeles, Calif. 90007.

A reader-contributor said not long ago: "The jail is the embodiment of everything we don't understand about our lives together—built as if we did understand." Now and then a human is born who is able to make magnificent structures out of such ignorance. We are thinking of Thoreau, a man peculiarly cherished, for some reason or other, by people in jail or prison. In A Field of Broken Stones (Libertarian Press, 1950), Lowell Naeve relates that as a boy he could never get interested in books. Then, in Danbury Federal Prison in 1942, where Naeve was serving time as a conscientious objector to war, a fellow objector brought him Thoreau, Whitman, Emerson, and Nehru (Toward Freedom). His mind came alive as a result. More recently, in "Notes from a Prison Diary" (printed in the Christian Science Monitor for Nov. 10 of last year), Nick DiSpoldo tells how he too learned to read-and to writefrom Thoreau:

As writing is a pastime of many prisoners, it is unfortunate that so much of the prose and poetry produced in prisons today is concerned with the melodrama of the prison community: riots, escapes, assaults, bad living conditions, and the revolutionary rhetoric of the "political prisoner." Thus, the erroneous impression prevails in many minds that each prisoner is either a political victim, a pathological misfit, or Paul Newman in stripes.

Early in my own incarceration I decided I would write while in prison. I had no formal education to speak of no one to help or encourage me, no idea of what it was I was going to write about. . . . So I began to read and devoured as much as I could from the limited prison library.

I went from author to author, from book to book, as destitute and undirected as the hobo who goes from train to train—not really knowing where he is going but only that he must continue on.

I remember my first spiritual romance with another mind. Someone had given me a copy of *Walden*. Before many pages were digested, my abundant bitterness had abated and I found temporary solace in the sylvan seclusion which Thoreau designed for himself at Walden Pond.

Thoreau taught me patience and awakened me to the truth that there indeed dwells a wealth of beauty in the simple and commonplace—things we take for granted because civilization has conditioned and oriented us to a sensual rather than spiritual existence....

After just one reading of *Walden* and several of Thoreau's *Journals* I was aware of a subtle change in myself.

Thoreau seems at times to do the most for human beings in extreme situations. He might smile at this idea and reply that a man in jail at least *knows* he is in an extreme situation, while the rest of us imagine that "things" are not yet quite that bad.

FRONTIERS

Changes and the Obstacles to Change

AN article by William N. Ellis in the *Bulletin of the Atomic Scientists* for last November begins:

The world is in the throes of a quiet revolution. In remote and forgotten corners of the globe, in the Omo Valley of Ethiopia, in a ghetto of Washington, in a jungle village of the Amazon, in the streets of London, in a hamlet of India, in the rice paddies of the Philippines there is a revival of local self-reliance. In over-developed countries as well as the underdeveloped, in rural areas as well as the cities, among the rich as well as the poor, people are solving their own local problems with their own local resources. They are slowly developing new concepts of production and manufacture which could radically change the industrial system from what we know today.

Six pages give an over-view of these developments in various parts of the world. The introductory paragraphs are useful in showing what is happening to the way people think. Since Francis Bacon, the writer says, we have felt free to think of science as independent of religion, or indeed its replacement. The world is there for us to use, more or less as we will. protagonists of this great change had clear warnings of what was likely to happen as a result of this division between the elements of human culture. In the fourteenth century Ibn Khaldun spoke of the devitalizing and polluting effects of urbanizing technologies. Thomas Jefferson counseled his countrymen to let the factories stay in Europe, and early in this century Gandhi warned against "the use of machine-made gadgets and advised his nation to base its growth on the small-scale cottage industries." Then fifty years Jacques later came Ellul's book, Technological Society, indicting technological systems as cultural straightjackets that force us to work for non-human purposes. There was little popular response, however, until the 1960s, when the ugly harvest of pollution, the multiplication of shantytowns around the world, emerging fears of nuclear energy, the worldwide revolt against modern colonialism, and, some years later, the energy shortage produced the increasingly emphatic verdict: the planet as we are using it *will not last*.

Mr. Ellis says:

Out of the worldwide melange of concerns are growing many small awakenings. No one of them will solve the worldwide complex of problems by itself. Many of these beginnings are, perhaps, in conflict with others. But, common to all is an optimism; the belief that science and technology do help determine social forms and individual lifestyles; and the conviction that with appropriate techniques and technologies people can again become masters of their own destinies.

The principal characteristics of these new beginnings are concern with the basic needs of people, distrust of bigness a conviction in the ability of people to erect change, and rejection of purely materialistic goals for human well-being.

After some detail on these developments, the writer says that the UN has not contributed much of anything to this change, that neither (with some exceptions) has the academic community, nor have governments played a part. "To a large degree these people-centered designs have sprung from the people themselves." Mr. Ellis thinks the movement will continue to give new direction to science and technology, no matter what governments do.

Yet there seems little doubt that governments and the powerful economic forces with which governments are allied will get in the way. Their influence is twofold. First, they own and control so much of present energy resources. James Kilpatrick said in the *Los Angeles Times* (Sept. 20, 1977)

What has happened in recent years is that the petroleum giants have moved horizontally into the acquisition of coal and uranium.

Fourteen of the top twenty owners of coal reserves today are oil companies. Nearly half the coal reserves now are owned by the petroleum giants. . . . Looking ahead, the prospect is not for giant oil companies, as such, but for energy conglomerates—for supercorporations effectively controlling every

form of energy production, transportation and marketing.

Besides this access to and control of existing resources, these companies have access to people's minds. Reviewing several books on the mass media in the *Nation* for last Oct. 29, Herbert I. Schiller says:

Television and radio are, in the truest sense, the bought instruments of huge, consumer goods producers: Proctor and Gamble, with its monstrous annual (1976) advertising expenditures of \$445 million; GM's \$287 million, General Foods' \$275 million; Mobil Oil's \$147 million. The total outlay of the top 100 national advertisers in 1976 reached almost \$8 billion.

No facet of daily life can remain untouched by these elemental relationships. . . . Monopoly banishes its overwhelming presence by convincing most people that they possess an abundance of choices—choices in goods, politics, cultural and personal decision making. The control process is carried a step further by defining "freedom" as the embodiment of these manifold choices.

The sit-back-and-enjoy-life message carried by the media makes painfully pertinent a question raised in *Acorn* for last October. This passage begins with a quoted remark by Allen Jedlicka:

"I find it difficult, having had some experience with farming, to advocate practices that will require more effort and more expense for the farmer if I am not willing to make a comparable sacrifice myself."

Will the public be willing to subsidize the cost of developing and diffusing time-saving, large-scale approaches to organic farming? The long-range benefits of systems such as Integrated Pest Management which rely on parasite, predator, hormone, and germ control techniques rather than traditional pesticides are obvious. But will we put up the dollars? If not, it is unreasonable to expect the farmers to shift. "Extrapolate what you do in your backyard garden with composting, fallowing, and side dressing to 600 acres, and one can better understand why many farmers prefer convenient chemical techniques . . . the hustling of the big agricultural chemical companies aside."

One might say to oneself, in a depressed mood, that the big companies will never "change," but this leaves out of account the fact that there are now people working for those companies who will eventually change and get out—people with some sense and some conscience. Both companies and governments, moreover, can be made to change by lack of nourishment. Methods and policies are already changing at the community level. Because of their unwieldy and insensitive nature, big institutions are always the last to change.