VOLUME XXXVI, NO. 36
SEPTEMBER 7, 1983

PLATEAU OF VISION

IN these days of lowering presentiments it is natural to look for good signs. But what are "good signs"? Economists take heart when retail sales increase, when inflation slows down, and when there are fewer bankruptcies reported from week to week. These fluctuations fill the financial columns of the serious press, even getting headlines when a small "upturn" seems to give ground for a bit of optimism, but there is a sense in which taking such marginal changes seriously may be no more than submitting to shallow self-deception. A far better sign would be general recognition, before the onset of collapse, of the fundamental changes in our society that must take place.

Today one can find such signs in publications from different parts of the world. An example is the book, *Revolt from the Center*, by three Danes, Niels I. Meyer. K. Helveg Petersen, and Villy Sorenson—respectively a physicist, a politician, and a philosopher—first published in Denmark in 1978 and now available in English (Marion Boyars, 99 Main Street, Salem, N.H. 03079, $5.95 in paperback). The view of the authors is evident from the following:

> Rising affluence has led to the triumph of self-interest in all classes and professions, while the morality of thrift has begun to look more like bad conscience. Admittedly it has become harder to believe in Keynes' words that "Avarice and usury and precaution must be our gods for a little longer still" and that they will then lead us out of the "tunnel of economic necessity" so that we can afford to see the fair as useful and the foul as harmful. By obeying these "gods" we have turned against us those other divinities which the five wise men [Buddha, Confucius, Zoroaster, Isaiah, and Pythagoras] identified with nature, that is, with the proper laws of existence. Nature's reaction to our economy may reveal that they and not the liberal economists were right. Ecological problems demand that we create a civilization that is in balance with nature.
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> Although human beings as creators of civilization can shape their own existence and organize society according to different standards, they cannot do so totally arbitrarily without turning nature against them. When large urban civilizations develop symptoms of decline even at their height it simply goes to show that the gap between a complex social system and human need can grow too great. The road to collapse is precisely the route indicated by Keynes: to let fair be socially harmful and foul socially useful.

Well this, some may say, is plain common sense. The interesting thing about the book, however, is that upon publication in Denmark it became an instant best-seller and its contentions were widely debated in the Danish press. This is surely a good sign. While the book was originally addressed to Danes, the authors point out (in a preface to the English edition) that the conclusions reached may have equal validity in a larger context, "since the social structure of Denmark is very much akin to that of the other Western industrial nations."

A further analysis explains the title of the book ("Revolt from the Center"):

> Material advances have not ironed out the differences between rich and poor on either the national or the international level. Theoretically political development has given everyone a share in government, but in reality it has made the authorities even more distant. . . . When viewed in terms of the arms race, environmental pollution and ruthless exploitation of natural resources, scientific and technical advances have created greater problems than those they have solved. The welfare state can boast of a growing number of psychological ailments apparently caused by the pattern of society itself. . . .
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> The greater the problems of the community, the greater intolerance grows. Right-wingers talk of a left-wing bias in society; left-wingers of a right-wing bias; and although both sides tend to exaggerate the achievements of the other, extreme attitudes have been far more vigorously championed both inside and outside parliament in recent years. The extremist movements also have their patented solutions to the

> problems of society. One side says that the bureaucratic state must be dismantled and the public sector reduced. The other side demands nationalization of the means of production. The polls still indicate that the majority of the people are unquestionably alarmed by these views. The fear of any radical solution whether left- or right-wing which might threaten our well-earned social benefits and bourgeois democracy remains an obstacle to social innovation. The old established parties are leaning inwards towards the center. And this means that the center is becoming a place where the opposing forces neutralize each other and stick to the time-honoured solutions instead of using it as a starting point for real innovations.

The authors, therefore, call for a revolt from the center, saying to their countrymen, and also to us: "If a small nation with a homogeneous population cannot govern itself, there is very little hope of an entire world of autonomous societies working together." The conception of "politics" of these writers ought to be identified as the politics of the polls, for the common good, as distinguished from the politics of power. They say:

> Using the term in a wider than purely religious sense, there must be a conversion from prevailing attitudes before there can be any change in policy. We must recognize that the fundamental values in life are not man-made but inherent in nature. We are still influenced by the liberalistic dogma that human labour is the source of all value while nature is merely the raw material for human enterprise. We are still influenced by the belief that there is an "invisible" hand steering economic development, that it is a "natural" process. In fact the opposite is true. Economic development has been accompanied by an artificial encroachment on nature; and it would be more accurate to speak of an "invisible hand" governing the natural ecological system, though not so invisible that it cannot hit hard when certain bounds are transgressed.

Needing to be overcome is the delusion that an affluent "consumer society" is the highest individual and social good. This goal is pursued alike by Adam Smith liberals and Marxist-Leninists.

> Economic freedom is by no means a foundation for political democracy, but on the contrary an obstacle to it. The vital question affecting mankind, as a whole, namely how our limited resources should be used, is decided in the main by a number of independent and anonymous private authorities who are not required to consider the social consequences of their decisions to any great extent. Society is left to answer for the consequences without being able to make its own choices. . . . Should the democratic states be serving the companies, or should the companies be serving the democratic state? The answer is self-evident. There are still powerful interests backing the liberalist belief that democratic freedom is dependent on freedom of competition, but they are not the interests of the majority. Nevertheless the great majority of private individuals identify more closely with private than with public enterprise. Marxists may regard the state as the extended arm of capital, but for most people it is more like an obstacle to private enterprise. Most people are snared in the prejudices of liberalist ideology.

This is the state of mind from which conversion must take place. The authors ask: "is it possible to believe in a social order and a world order that is not in harmony with nature and in which the natural needs of people are not fulfilled?"

> We know that the continued exploitation of nature is undermining our existence and that the continued oppression of people makes that existence meaningless. If we want to believe in some kind of future, we must believe in the possibility of a society which is in balance with its natural environment and in which the human being is not a passive object of external decisions and influences but an active, independent person whose freedom to develop is a precondition for the free development of everybody. It is not necessary to believe in the possibility of such a society, a humane ecologically sustainable society, ever being created, in order to see that it is right to work towards it.

On the question of national security, the authors say that independent analysis has shown that the arms race will lead, sooner or later, to a nuclear holocaust, making expansion of defense systems along conventional lines "look totally absurd." In Denmark there is some recognition of this, and Danish politicians have been wondering about "some form of non-violent defense."

> Arguments supporting the application of non-violent principles were based on two points: first, that use of violence is unacceptable on moral grounds, and second, that war in the nuclear age is totally pointless. Experience had shown that non-violent defense is not synonymous with defeatism and apathy. On the contrary, defense of this kind can be much more effective than a military machine which is likely to be rapidly immobilized in the event of external attack. The aim of non-violent defense is to influence the will of the aggressor and to prevent him from achieving his ends.

Fundamental in the proposals of these writers is active local democracy at the community level. They suggest unofficial citizens' community councils, more or less like the "advisory committees" described by Harold J. Laski in *The Dangers of Obedience*, as a means of strengthening local democracy. Education will also play a large part:

> In preparing an educational structure suited to the future society our primary objective must be to break down existing, rigid divisions between professions and to remove the distinctions between theoretical and practical education. . . . Educational reforms intended to meet the requirements of the future society must balance theoretical knowledge with practical work experience in all kinds of education and at every level. Not in the form of superficial visits to factories and institutions, but as an integral part of education and of sufficient length of time to get a real feel for working conditions. There must be a steady increase in opportunities for children to deal with real life, not just prepare for it. They must handle things themselves. . . . A look at what has been achieved in experiments where young people are building houses, erecting windmills, manufacturing furniture, working in fishery, agriculture, horticulture and so on, leaves no doubt that the necessary switch in the education sector can be made.

The ideas in *Revolt from the Center* are not new. The authors have quite evidently learned from writers such as Gandhi and Schumacher, as well as from their own experience. The book is notable, however, in the way it puts a number of good ideas together, and notable, also. in that it has been taken seriously in Denmark. Its achievement is in making common sense recognizable to the reader. This sense is especially present in the preface to the English edition, where the authors say:

> Smaller nations may be more dependent on larger nations but their opportunities for change are better than those of the bigger countries. Denmark has just over 5 million inhabitants—half the population of New York. If it is not possible to create conditions there in which the citizens can feel *at ease* and for which they assume joint responsibility, then it is not possible to do so anywhere. The ideas concerning decentralization, participation and protection of the environment which are common to many of the new movements of the 1970s cannot be put into practice by directives from above: protest against the large units must proceed from the smaller—on an international level the small nations share common interests in relation to the superpowers. . . . One of the chief barriers to the development of a humane sustainable society is the increasing dependence of politicians on experts who are generally interested in progress being concentrated in their own areas of specializations. It was in order to counteract this tendency, among other reasons, that the three of us, a physicist, a politician, and a philosopher combined to write this book.

A comparable recognition of the kind of change that is needed—required—in thinking about society is found in the editorial outlook of a quarterly journal published in the United States—*democracy* (43 West 61st Street, New York, N.Y. 20023—$4 an issue, $20 a year), edited by Sheldon Wolin. In this year's Spring issue, Prof. Wolin (in his editorial), after noting the fact that there have been no "new policies" adopted by this country to meet the all-pervasive problems of the times, goes on to say:

> The main lesson from the failure, first of the liberals and now of the conservatives, is that there can be no solutions to the problems of the economic system. The reason for this is simple. If by a problem we mean some state of affairs, such as unemployment, the flight of capital, or widening disparities in income, that is unprecedented in capitalist history, or inconsistent with it, then the harsh fact is that these problems are not problems within that system. However regrettable they may seem, they are not obstacles that have to be overcome if the system is to continue. They are inherent, or

"structural," that is, part of the continuing and necessary price of the unprecedented wealth that the system is said to create.

The problems, then, are consistent with the systems, even inevitable. Unemployment is a recurrent condition produced by the need of capitalists to adjust the labor force to market conditions and changing technology. Already there is widespread talk in the higher circles that 7 per cent unemployment will have to be accepted as the average likely under conditions of economic recovery. Capitalism likewise never promises a wise use of natural resources, a concern for natural environments or human communities, a solicitude of the health, safety, or old age of its work force, or the likelihood of meaningful work except for the executive class. Only the possibility of social unrest brings these problems to the attention of business leaders; otherwise they are nonproblems. . . .

The system cannot be challenged or changed so long as citizens accept the terms of understanding inculcated by politicians, the media, and all of the foundations, think tanks, and independent experts subsidized by corporate money. The ideology that now blankets public discourse asserts that there is some reified, free floating, independent entity—"the economy"—whose needs and whims decree that every citizen below a certain income bracket shall passively submit to whatever elected officials, bureaucrats, corporate executives, and experts determine is necessary to enable the economy to "recover." The result is a crazy upside-down world: human lives and aspirations are adjusted, even subordinated, to the system, while no one in public life ventures to suggest that maybe the first question is what our needs and aspirations are as a people and where we should try and formulate them.

The "economy" is not "given" by the laws of nature, but something people make. It can be made into something else, given the possibility and the reasons for carrying out the change.

We need to ask how we as a people want to be in the world with other peoples—as economic rivals? as an imperial power frozen into hostility with communism? as making a new beginning in a long process toward developing democratic relationships among different peoples instead of relying entirely on communications between a handful of leaders and deputies?

The authors of *Revolt from the Center* spoke of the need for "conversion." Prof. Wolin lists some of the obstacles to be overcome.

Citizens cannot be expected to measure up to the demands of democratic political life if their formative experience in the workplace teaches hierarchy, subordination, discipline and a fragmented experience. We need, above all, to consider the economy as a legitimate object of citizen action, legitimate because in shaping the economy to common needs we are, in effect, reclaiming our powers—our skills, our bodies—shaping them to our purposes rather than allowing them to be extracted like raw materials, then transformed into money and commodities that become the means of tying us to a system of necessity and desire.

In 1957 the late Jayaprakash Narayan wrote a substantial essay, *From Socialism to Sarvodaya*, to explain to his friends and associates why he withdrew from active participation in the movement for democratic socialism to join the Sarvodaya movement and Vinoba Bhave's work. It was the same "beacon-lights of freedom, equality and brotherhood," he said, that had led him into socialism that then turned him to follow Gandhi, regretting only that he did not reach that point in his life's journey "while Gandhiji was in our midst." During the years of his education, obtained in the United States, JP had become a Marxist, but he finally concluded that "unless socialism is transformed into *sarvodaya,"* the goals of socialism would remain beyond reach, "and just as we had to taste the ashes of independence, so future generations may have to taste the ashes of socialism." His explanation of why he reached this conclusion has direct bearing on the question of "conversion." He wrote

My final break with Marxism, though not with politics, had come during the three weeks' fast at Poona. It was then that a long process of questioning started by the Russian purges came to an end and it became clear that materialism as a philosophical outlook could not provide any basis for ethical conduct and any incentive for goodness.

If man and his consciousness and the society and culture which he has built up are mere manifestations of matter—howsoever dialectically

> active—I can see no reason why in such a society, anyone should try to be good, that is, be generous, kind, unselfish. Why should we then feel sympathy with those who are weak, poor or sick? What is matter will dissolve into matter after death. So, what incentive can there be for moral behaviour? Lust for power or wealth, or desire to win the acclaim of people, or the regard of one's peers may be incentives to action. But such incentives can have no concern with valuations of right or wrong. . . . I am not suggesting that among philosophical materialists there have not been examples of great sacrifices for noble causes. What I am suggesting is that their action was not consistent with their philosophy. . . .
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> I am aware that there have been and are quite a number of socialists who have been aware of the danger of a purely materialistic view of life, but nevertheless the main concern of socialism has been and is with the material aspects of life. The socialist or labour parties and the trade unions do not educate the people about a balanced or whole view of life. If the socialist movement became conscious of the issue I am raising, its whole attitude towards science, industrialization and social organization and international relations would be revolutionized. . . . I decided to withdraw from party-and-power politics not because of disgust or sense of any personal frustration, but because it became clear to me that politics could not deliver the goods, the goods being the same old goals of equality, freedom, brotherhood, peace.

The course he chose was the one set forth by Gandhi in *Hind Swaraj* and by Vinoba in his labors for village self-government.

The themes common to the several sources we have quoted from are gradually shaping a plateau of common sense with vision.

REVIEW
THE UNAMERICANIZATION OF FREUD

THIRTEEN years ago, in *Ego and Instinct* (Random House), Yankelovich and Barrett reproduced a conversation between Ludwig Binswanger and Sigmund Freud which they called "a dramatic and pivotal episode for understanding the history of psychoanalysis."

> In the conversation with Binswanger . . . the two men began by discussing a . . . case: a patient known to them seemed to make definite progress all along the way, but was unable to take the last decisive step toward cure, and so succumbed to a self-destructive neurosis. Binswanger ventured to suggest that the failure might be understood as a "deficiency of spirit." Then, as Binswanger reports it, "I could hardly believe my ears when I heard him [Freud] say, 'Yes, spirit (*geist*) is everything'."

"Man," Freud said to the younger psychiatrist. "has always known that he has spirit. . . . it has been for me to show him that he is instinctual." The writers of *Ego and Instinct* then say:

> Confronting the contemporary situation, we are hardly likely to agree with him that man today knows he has spirit. In fact, a large part of psychoanalytic ego psychology is devoted to recapturing qualities of the human person which Freud simply took for granted in his reference to spirit but which we can no longer take for granted today.

Freud also said to his friend, Binswanger, in a letter:

> I've always lived only in the *parterre* (*pit*) and basement of the building. You claim that with a change of viewpoint one is able to see an upper storey which houses such distinguished guests as religion, art, etc. . . . If I had another lifetime of work before me, I have no doubt that I could find room for these noble guests in my little subterranean house.

Now comes a new book by Bruno Bettelheim, *Freud and Man's Soul* (Knopf, 1982, $11.95), which gives light on what the author regards as the American distortion of Freud's outlook and intentions. He doesn't transform Freud into an "idealist" and metaphysical thinker—which would be quite impossible—but he shows Freud to have been over-simplified and seriously vulgarized by his followers and interpreters. Why did this happen? Bettelheim gives two reasons. First, his translators tailored their versions in a way that omitted the rich humanism of Freud's own background. Second, the Americans altered both the spirit and intentions of his work. Dr. Bettelheim comments: "If American psychoanalysts had shared Freud's concern for the soul, and his disregard for adaptation or adjustment to the requirements of society, then the history of psychoanalysis in the United States would be entirely different, since psychoanalysis would have had to transcend the narrow confines of medicine. But, of course, if this had happened, psychoanalysis might not have been successful in the United States."

Freud, Bettelheim maintains—and demonstrates—was a cultured European humanist, deeply impressed by the classics of antiquity, and soaked in Goethe. *Freud and Man's Soul* is mainly concerned with the suppression of this temper in virtually all the English translations of his works. Bettelheim's view is suggested by the following:

> Freud showed us how the soul could become aware of itself. To become acquainted with the lowest depth of the human soul—to explore whatever personal hell we may suffer from—is not an easy undertaking. Freud's findings and, even more, the way he presents them to us give us the confidence that this demanding and potentially dangerous voyage of self-discovery will result in our becoming more fully human, so that we may no longer be enslaved without knowing it to be the dark forces that reside in us. By exploring and understanding the origins and potency of these forces, we not only become much better able to cope with them but also gain a much deeper and more compassionate understanding of our fellow man. In his work and in his writings, Freud often spoke of the soul—of its nature, its structure, its development, its attributes, how it reveals itself in all we do and dream. Unfortunately, nobody who reads him in English could guess this, because nearly all his many references to the soul, and to matters pertaining to the soul, have been excised in translation.

"Soul," for Freud, did not mean what it means for those who believe in immortality; he was and remained an "unbeliever"; yet as Bettelheim says: "The image of the saving of the soul is one without which neither the pantheist Goethe nor the atheist Freud felt able to convey his deepest thoughts about man's destiny." Missing in translation is the underlying feeling-tone of Freud's work.

> This fact, combined with the erroneous or inadequate translation of many of the most important original concepts of psychoanalysis, makes Freud's direct and always deeply personal appeals to our common humanity appear to readers of English as abstract, depersonalized, highly theoretical, erudite, and mechanized—in short, "scientific"—statements about the strange and very complex workings of our mind. Instead of instilling a deep feeling for what is most human in all of us, the translations attempt to lure the reader into developing a "scientific" attitude toward man and his actions, a "scientific" understanding of the unconscious and how it conditions much of our behavior.

As a youth who grew up in Freud's native Vienna, Bettelheim had much the same background and read Freud in German. Later in life, coming to this country, he was shocked to discover the great difference that translation had accomplished. Bettelheim tells the stories of the myths Freud used for illustration and nomenclature, pointing out that they are neither known nor understood by most Americans, who are unaware of his tenderness, his caution; and here Bettelheim suggests, "it has come to be assumed that psychoanalysis advocates 'letting it all hang out,' all over the place, all the time. 'Know thyself' has become 'Do what you please'."

Bettelheim feels that this small book (112 pages) is only a beginning at the reinterpretation of Freud for English-speaking readers, and he has focused on one or two important themes for illustration. The criticism is specific as to language, generalized as to philosophy.

Well, what did Freud mean by soul? Bettelheim answers:

> By "soul" or "psyche" Freud means that which is most valuable in man while he is alive. Freud was a passionate man. For him, the soul is the seat both of the mind and of the passions, and we remain largely unconscious of the soul. In important respects, it is deeply hidden, hardly accessible even to careful investigation. It is intangible, but it nevertheless exercises a powerful influence on our lives. It is what makes us human; in fact, it is what is so essentially human about us that no other term could equally convey what Freud had in mind.

Freud was shocked by the strong influence of Behaviorism in America.

> Freud was disgusted by a civilization that could explicitly deny the phenomenon of consciousness. He was also dismayed by what he recognized as the prevalence of a shallow optimism in the United States, which stood in stark contrast to his own tragic and essentially pessimistic view of life. But if Freud had put into words what he held most against the United States, he might have said that America was lacking in soul.

Yet against this may be set the conclusion of Yankelovich and Barrett, to the effect that the Freudian ego is weak since it borrows its energies from instinctual drives and has no ends of its own, representing the individual's life experience pitted against the lower psychic forces. For this reason, perhaps, Freud was forced to his pessimism. Yet he was the first to recognize the complexity of the psyche, and to show that there are conflicting principles of action in us—eventually leading to the idealistic currents of thought developed by several independent minds which came under his influence. (See Ira Progoff's *The Death and Rebirth of Psychology;* and, more generally, "The Americanization of Psychoanalysis" by Walter A. Weisskopf, in MANAS for Jan. 29, 1964.)

There is a sense in which a very good book, *On Not Being Able To Paint*, long out of print (it first appeared in 1957) but now available in paperback ($6.95), published by J. P. Tarcher, 9110 Sunset Blvd., Los Angeles, Calif. 90096, is a tribute to Sigmund Freud. It reports a self-analysis by Joan Field (the pen-name of Marion Milner) through the use of drawings and watercolors, and has appeal for all who are

endeavoring to understand themselves. Anna Freud, Sigmund's daughter, says in a Foreword:

> She [Marion Milner] chooses as the object of her scrutiny not the professional and recognized artist but herself as a "Sunday-painter"; not the finished masterpiece but her own fumbling and amateurish beginner's efforts to draw and paint. In short, she analyzes not the mysterious and elusive ability of the genius who achieves self-expression through the medium of painting, but—as the title of the book suggests—the all too common and distressing restrictions by which the creativity of the average adult individual is held in check.

There are hardly any Freudian terms in the book, only the author's account of what she did and what she found out about herself—and, of course, other human beings. She would start out on a drawing, then let the pen or brush take over. Then she studied the result. She learned that painting is not copying nature, although it may begin there. She found that for work to be "alive," the imagination of the artist must prevail, making the scene or object its own. Following is a passage "On the Role of Images" which illustrates the quality of the book:

> The first advantage of the thinking in pictures was that it apparently was much quicker; many of the drawings which had taken me so many years to translate into logical terms had been made in ten or twenty minutes. The second advantage was that the statements in pictures were much more comprehensive than the verbal statements; meanings that stretched back through the whole of one's experience could be presented to a single glance of the eye. . . . The statements about living contained in the drawings were certainly very private ones; they could not, as long as they were just drawings, be argued about and proved right or wrong. Only when they were translated into intellectual statements, as has been attempted in this book, could other people argue about them and agree or disagree. . . . I had so often felt, when a thought was first experienced in terms of a glimpsed visual picture, that to try to turn it into words would be to lose something irreparably, that its wholeness and splendor would be for ever destroyed. It seemed now that I had been right in supposing that something would be lost, wrong in assuming that it would be forever, wrong in not realizing that the acceptance of division, analysis, bits, acceptance of the partialness which was inevitable in logical communication, was necessary for the growth of new wholes.

COMMENTARY
OUGHT INTO IS

IN *Between Past and Future,* writing on the crisis in education, Hannah Arendt remarked that teachers, who introduce the world to students, must accept responsibility for the world. If they can't or won't do this, she went on, they shouldn't be permitted educational contact with the young. Nor should they, she added, bring children into the world.

Interestingly, this, or something like it, is the view of Joseph Weizenbaum, quoted in this week's "Children." In the last chapter of his book (*Computer Power and Human Reason,* Freeman, 1976) he considers the common idea that the only means of saving the world "depends on converting others to sound ideas." That rule, he says, "is false."

> The salvation of the world depends only on the individual whose world it is. At least, every individual must act as if the whole future of the world, of humanity itself, depends on him. Anything less is a shirking of responsibility and is itself a dehumanizing force, for anything less encourages the individual to look upon himself as a mere actor in a drama written by anonymous agents, as less than a whole person, and that is the beginning of passivity and aimlessness.
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> This is not an argument for solipsism, nor is it a counsel for every man to live only for himself. But it does argue that every man must live for himself first. For only by experiencing his own intrinsic worth, a worth utterly independent of his "use" as an instrument, can he come to know those self-transcendent ends that ultimately confer on him his identity and that are the only ultimate validators of human knowledge.

Then, as teacher, he says:

> But the fact that each individual is responsible for the whole world, and that the discharge of that responsibility involves first of all each individual's responsibility to himself, does not deny that all of us have duties to one another. Chief among these is that we instruct one another as best we can. And the principal and most effective form of instruction we can practice is the example our own conduct provides to those who are touched by it.

This, in the myth that is more than myth, was the way chosen by Prometheus, and it was the rule of life of Gautama Buddha. Prof. Weizenbaum has provided an excellent definition of the human species, as it ought to be. Converting ought into is is our evolutionary role.

CHILDREN
. . . and Ourselves
THE PICTURE OF THE WORLD

WRITING in 1939 (in *Art Education Today*, Teachers College, 1939), Lazlo Moholy-Nagy said: "The greatest problem in education today is to teach students to think in terms of our own time and to give a comprehensive picture of the world around us." The statement makes a fine beginning, but only a beginning. It immediately boils down to asking, What are the "terms of our own time" that should be used, and what above all else belongs in the "comprehensive picture of the world around us"?

Naturally, there will be conflicting answers to these questions. There is, for example, the matter of computer use in the schools. An article in a recent *Parents' Bulletin* of the School in Rose Valley (Moylan, Pa.) begins:

> Ask anybody what *the* most desired present is these days and you'll be told: a computer. We are bombarded by ads which aim to convince us, no matter who we are, that our lives will be made more complete with the acquisition of our own personal computer. You can map out the family shopping list, and the family budget, plan a trip, figure out your homework, balance your checkbook, keep the kids amused, and chart the batting averages of your favorite baseball players. According to the ads, computers can do everything but feed the baby and walk the dog. The computer has become the latest in a long list of status symbols, the latest step in keeping up with the Joneses. It's right up there with designer jeans and hot tubs. And as with most items that determine one's status, the rush is on and hundreds of computers are sold each day to people who haven't the faintest idea how to use them but are convinced that they need one.

However, the two teachers who wrote this article are not total skeptics. Their school has had a computer since 1979 and the staff is endeavoring to increase its "computer literacy" (whatever that amounts to). The children have access to the machine during recess.

But "the rush," as these writers say, is on. A pull-out section in the *Christian Science Monitor* for last April 15 had sixteen pages of articles and ads (by schools, some of which teach computer use), all on computers, suggesting or implying that computer literacy will soon be a "survival art"! An article written to advise school administrators begins:

> The floodgates are open for educational computer software. "There's a tidal wave of software hitting the schools," says Cary Olin, a 13-year teacher-turned-computer-education-consultant. The deluge comes from an estimated 800 companies producing and marketing some 6,000 educational programs. For teachers and administrators with little or no computer training, these are uncharted waters.

The writer, David Scott, proceeds to advise.

As a matter of conscience perhaps, the *Monitor* editors include an interview with Joseph Weizenbaum, professor of computer science at MIT, author of *Computer Power and Human Reason* (reviewed in MANAS for Jan. 7, 1976), who admits to being "one of the few certified computer professionals willing to say publicly anything negative about them at all." We strongly recommend his book, which lays stress on what computers cannot accomplish. Our own conclusion, after reading it, was that computers may be as efficient in arming our errors with spurious certainty as in extending the application of our logical skills.

The *Monitor* interviewer says:

> Dr. Weizenbaum is concerned that the addition of computer courses may crowd out other worthwhile subjects, especially those in the humanities. . . . A more unsettling thought, he says, is that children may be conditioned by computers to think all problems can or should be reduced to computer terms. In this sense, computers have the potential to skew how children view reality, since most problems in the real world defy such simple definition.
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> "What happens is that somebody comes along and translates it into computer terms anyway—capturing only a tiny slice of the problem". . . . A vivid example, he says, is a computer simulation he saw in which grade-schoolers reconstructed elements of the Faulkner Islands war. The children made decisions about military hardware and troop movements—and seemed fascinated by the subject. Weizenbaum contends this teaches children "that even a simple model of reality says something important about reality." But in fact, he says, the simulation captured only a fragment of the problem.

> Even more serious, however, children learn to distance themselves from the human situation—in this case a tragic war. He says the long-term effect could be to induce a sort of tunnel vision in youngsters, whereby they no longer appreciate the complexity of human existence. "They get the idea that only things that are computable, that can be stuffed into a logical framework, are true or worthwhile.

There are of course matters that can "be boiled down to purely computer terms," and in this case computers become powerful tools. Yet Prof. Weizenbaum finds it worrisome that "kids aren't being taught to distinguish between tangible and intangible problems."

Meanwhile, for readers who want to know more about the subject of computer use in education, we suggest a reading of No. 31 of John Holt's *Growing Without Schooling.* There are three big pages of small type on the subject, including a contribution by Herbert Kohl. Holt comments, saying that while there is certainly value in making available to children "a world in which they can make things happen, and in the ways they want,"

> . . . there is a danger, and we have signs already how great it may be, that some children (adults too) may so love their power over the mini-world of the computer that they will hide in that world from the larger world outside in which they control so little. May not autistic children be in essence people who, bewildered and terrified by the unpredictability and uncontrollability of the real world, have drawn back into a shrunken world of their own making in which they can predict and control everything?
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> Our age worships power and control far too much, and I doubt very much that a remedy for this cultural disease will be to put some form of total power and control at the disposal of everyone—or everyone who can afford a computer. Let's discuss this further. . . .

Here, in his last paragraph, John Holt uses two words, "power and control," that ought to be included in any "comprehensive picture of the world around us." On top of the maps of the world in terms of geography, oceanography, and the other earth sciences, at some point in their lives the young will need to add schematic outlines of the uses of power and control in the modern world. They will need to do this if the picture of the world is to be *comprehensive.* High school is surely not too soon to begin with this. Curriculum? Finding material is no problem It pours into MANAS from the mails every week—books, pamphlets, magazines, papers on the misuses of power and control. Getting such analysis into the schools is the problem, since schools are subject to state control, and have habits of their own as well.

Those who know something about the schools from first-hand experience—John Holt is one of these—no longer look to the institutions of our time for either education or constructive change. They look to themselves. Yet there are places around the country—places where students go in fives and tens—to learn of life which does not involve power and control, and which as a matter of course try to bind up the wounds—the open wounds—left by application of power and control. We are thinking of places like the Land Institute (Route 3, Salina, Kansas 67401), run by Wes and Dana Jackson, where the project is food supply—learning how to grow "healthy food on a healthy land." In the quarterly *Land Report,* issued by the Institute, edited by Dana Jackson, there is plenty of criticism and analysis of what power and control has done to modern agriculture, and what, before too long, the result will be for all of us. But the dominant note of education at the Institute and in the *Land Report* is on doing things the way they ought to be done, and why. This year the program began with ten students who had this daily schedule:

> We spend mornings in the classroom unless impending rain makes it prudent to work outside and finish certain projects. The "warm-up" session is from 9:00 until 10:00 A.M. After a short break, we discuss assigned readings until noon. Afternoons are for physical work associated with agricultural research, maintenance and repair of solar and wind energy equipment, construction projects, and unkeep of our buildings and tools.

After reading a few issues of *Land Report*—or better, visiting the Institute to absorb what goes on there—you begin to see that this program of education and project on the land is no "specialty" in education but an ideal curriculum in the terms proposed by Moholy-Nagy.

FRONTIERS

Slow Is Beautiful

AFTER the heaviest rains of early last spring, the palisades fronting the Pacific Ocean along the coast near Santa Monica began, once again, to move toward the sea. Great mounds of dirt descended on Pacific Coast highway, much of it left there for months by the highway authorities, for fear that moving it would bring down further slides. The excessive rain, however—more than double the usual amount—had another effect. Pool owners along the coast, after testing the water for chlorine and acid content, found that their pools were overloaded with acid, calling for balance with alkali. Where did the acid come from? Inquiries revealed that it came from the rain—Southern California's share of acid rain.

We've all by now heard of acid rain, but what is it? In the May *Country Journal*, a writer explained that while rain is normally slightly acidic, today's acid rain is by no means normal.

> In many places, precipitation is more than a hundred times more acidic than it should be. The cause is simple. The burning of fossil fuels by industry and commerce sends excessive amounts of oxides of sulfur and nitrogen into the atmosphere. So what we are really talking about, when we talk about acid rain, is simply air pollution.
>
> In California, for example, acid fogs are the problem. Combine smog, which is a dense concentration of oxides in the atmosphere, with moisture, and you have acid fog. But California's problems pale beside those of the Northeast, over which the prevailing winds carry the smokestack exhaust of the Ohio Valley. Vast quantities of high-sulfur coal drew industry to the Ohio Valley in the first place and this coal continues to provide local residents with electric power at a lower cost than the national average. The cost is paid downwind.

Tall smokestacks—some even a quarter of a mile high—only spread the pollution further. Other contaminants, such as particles of mercury, lead, and arsenic are also contained in acid rain, although their effect is not yet determined. But the effect of acids is known.

> Acids dissolve things. That's why the Statue of Liberty is deteriorating, why there is such concern about the preservation of buildings, particularly those made of limestone. But of more sinister significance is the chemical reaction that takes place when an acid dissolves something. Take a penny, for example, and leave it in some lemon juice for a day or so. The penny will shine like new, because the dirty, outer layer of copper has been dissolved. The lemon juice will take on a greenish-blue hue. That's because the copper, normally insoluble, has dissolved, become a soluble salt, something we can eat, something we can absorb into our bodies. Don't eat it though: it's poison. Now we have a new problem. A previously innocuous metal has been transformed into a poison. That, on a global scale, is how acid rain, by dissolving metals with which it comes into contact in the soil and elsewhere, is contaminating lakes and streams and, finally, drinking water.

In Vermont, a botanist, Hubert Vogelmann, who has been studying a mountain forest near Burlington for twenty-five years, is finding toxic heavy metals such as lead, cadmium, mercury, zinc, and aluminum in the soil. The aluminum is ordinarily inert, but the acid rain makes it chemically active, so that it enters the cells of plants and animals. Aluminum, not the acid rain itself, kills the fish in the lakes and streams, by clogging their gills. It may also be killing the trees. Half the red spruce of one mountain area are now either dead or dying.

> The aluminum, released into the soil by acid rain, poisons the microbes that live on the tree's roots and supply the roots with nutrients. Aluminum is also beginning to be found in tap water where acid rain falls. That's bad news because aluminum is apparently toxic. Several reports indicate that it leads to brain damage and premature senility.

Another brief instruction in the disturbance by technology of nature's balances comes from India, in *Science for Villages* for last February. The writer, Devendra Kumar, speaks of the time when the earth was young, when vegetation grew at a great rate, absorbing the carbon dioxide from the air and storing it as carbon in plants, where later it became coal and oil.

> This sudden arrest of carbon reduced the content of carbon dioxide in the atmosphere to a very low

> level. And as carbon dioxide is the insulator which keeps the earth warm, its reduction led to a cooling of the globe and the polar ice caps spread down toward the tropical latitudes. By suppressing the vegetations under ice, the glaciers prevented further depletion of the carbon dioxide in the air. After millions of years the carbon dioxide balance was restored and it is the trapped carbon in fossil fuels of those ages that we have as coal and petrol. Now, however, a reverse process is going on. The burning of fossil fuel in larger and larger quantities is bringing more and more carbon dioxide into the air, and the increase of insulation of the earth is thereby leading to higher temperatures for the planet.

Kumar points out the danger in speeding up processes beyond natural tolerances. In the case of the unabsorbed carbon dioxide, there is the danger that the earth will heat up to self-destructive levels. He makes a comparison:

> The bullock cart with its slow motion is not bothered by the high quantum of friction between its axle and the wheels since, at six kilometers an hour, this friction is within the limits of tolerance and does not produce any heat. But if the same cart were made to run at ten times its normal speed, its axle and wheels would burn themselves out. The friction inherent in a system has therefore to be kept in inverse proportion to its speed. Hence, if technology runs faster and faster, without at the same time bringing down the frictional levels of the environment in which it acts, tensions develop beyond the level of tolerance, creating chaos and crisis.

As Leopold Kohr has put it, Slow is beautiful.