NOTES ON THE FUTURE

A GREAT many of the responsible men in the world now busy themselves publishing horrifying statistics, issuing warnings, making predictions. There is a sense in which these men have "knowledge," and they feel a duty to use their knowledge for the general welfare. Yet the popularization of knowledge almost invariably produces a change in the content or meaning of what is communicated. A statement about something is not the same as firsthand experience of it. A vital dimension is lost in the reporting. We can have a lot of things in our heads as the result of hearing statements which are in some sense knowledge, yet relate to those things very shallowly-not at all as we relate to or use the things we really know. What we really know is a part of our being; we act upon it, base our thinking on it, often hardly aware of how or why.

This is no new discovery about human beings. The responsible men who issue warnings soon recognize the difficulty of "getting across" what they have to say. But they nonetheless keep on issuing warnings, hoping to be heard. For example, D. J. R. Bruckner, a columnist in the Los Angeles *Times*, wrote recently (Sept. 21):

Japan and the United States this summer agreed to work out some common principle on pollution control. The very inadequacy of such a step emphasizes the problem. The world has no mechanism for adequate agreements, no legal foundation for them beyond treaty powers, how inadequate those are is illustrated by the complex frustration of reaching worldwide agreement banning nuclear weapons.

National institutions are simply disappearing as realities. Look at business. Privately created international currencies are fueling larger amounts of business every day, multinational corporations and banks with a reach beyond governments are springing up. They directly affect the lives of individuals across national borders. So does that child of technology, pollution. Nations have lost the ability to transmit the

effects of action to their own people or to shape those effects to national purposes.

This problem is not academic; it is the most real political problem in the world. For, if national institutions lose the power to do something for people, to make them happy, what is their use? The development of business and technology has diminished their legitimacy; any meaningful effort to preserve the world's environment will necessarily diminish it more. Conversely, a failure to deal effectively with pollution would destroy the legitimacy of national institutions completely.

Mr. Bruckner has much more to say—on the inability of the nations of the world to agree on the internationalization of the seabeds, for example—but his point is already made. What is his point? Is it that things are pretty hopeless? He has a suggestion or two, but nothing to relieve the essential gloom of his predictions.

In another part of the same day's *Times* are two similar stories on one page. Residues of mercury are building up in the fish and other wildlife of California, we are told. "Mercury poisoning," unlike most other forms of pollution, "can be deadly." And like DDT it tends to be cumulative in both nature and man. Tests are being made, so far showing that most sports fish and game birds have a mercury content below the amount which would make them "unfit for human consumption." But where do these creatures get the mercury? The answer is that California and Nevada mine about 90% of the nation's mercury, and there is still some lying around from the days when it was used to extract gold. Further, seed grain is treated with mercury to guard against fungus infection. "Unsafe mercury levels" found in striped bass in the waters of the delta area of the San Joaquin and Sacramento rivers and in pheasants in the Central Valley caused the investigation.

On the same page, Art Seidenbaum, another columnist, reports a luncheon during which Dr. Edward Stainbrook, the chief psychiatrist of the Los Angeles General Hospital, told the guests that the violence of the times is due to "fear." Nobody present knew what to do about the growing anxieties of the American population. Fear afflicts the middle class in particular, and Dr. Stainbrook said that if you confront a man with his fear you may even increase his anxiety. "Fear," he added, "is the most intolerable human emotion."

Perhaps it is for this reason that the responsible men rely on issuing warnings. They must think that this is the only way to generate responsive action. The idea is that by frightening people about their own future—it may be possible to get them to work for a better future for all.

One formidable assemblage of figures about the immediate future that is, the next thirty years—is concerned with the absolute limit on the resources of the planet. By the year 2000, with the present rate of population growth, there will be so many people that millions will starve unless we all resign ourselves to eating algae. Terrible famines, according to the Paddock brothers, who wrote Famine 1975! will come much sooner than that. Actually, we could devote a whole year of MANAS to printing the statistics of what seems inevitable doom. Saying this does not mean to imply that the compilers of these figures attempt to exaggerate. One authority, Dr. Wayne H. Davis, a biologist at the University of Kentucky, declares that conventional economists are "totally unaware of the realities of human ecology," and he believes that the expanding economy of the United States is even now grinding to a halt and will soon go into reverse. The only hope is to slow the rate of destruction of the United States as a land capable of supporting human life.

It is a difficult situation. One sits in one's home reading a newspaper or a magazine, learning that his children's future, if not his own, is threatened by activities which, only ten years back, were generally regarded as the foundation of American prosperity. An hour ago he parked his new car in the driveway, but now he reads:

The nation's 85 million cars cause 60% of the air pollution in the cities. Fully aware of the pressure to reform, Detroit will introduce 1971 models that exhale only 37% as much carbon monoxide as did 1960 models. To achieve this, however, requires increased engine heat, which in turn will increase the nitrogen oxide emissions. And nitrogen oxides are particularly dangerous: under sunlight, they react with waste hydrocarbons from gasoline to form PAN (peroxyacl nitrate), along with ozone, the most toxic element in smog.

"We now have 50% more nitrogen oxides in the air in California," says Ecologist Kenneth E. M. F. Watt. "This has a direct bearing on the quality of light hitting the surface of the earth. At the present rate of nitrogen buildup, it's only a matter of time before light will be filtered out of the atmosphere and none of our land will be usable." Tougher auto emission standards in California will start reducing the nitrogen problem next year. But Watt argues that California's air pollution is already so bad that it may start a wave of mass deaths by 1975—perhaps beginning in Long Beach. He also blames pollutants for the rising number of deaths from emphysema in Southern California. Trouble may well loom up for Los Angeles, which sits in a smoggy bowl that often contains only 300 ft. of air. Almost every other day, the city's public schools forbid children to exercise lest they breathe too deeply. (*Time*, Feb. 2, 1970.)

What can a man who hears this do? No doubt some people believe they have answers to such questions, and are giving them, as urgently as they can. But we have yet to read an ecologist who feels adequately encouraged by what is being done. Even for people who are aroused and active, *access* to channels of effective action seems very difficult.

Ten years ago we had a similar situation—a situation by no means much changed, but rather displaced from public attention: the threat of nuclear war. A small number of well-informed scientists, along with some others, had been working for years to arouse the general public to awareness of this danger. They had comparatively little effect on the population at large. A psychiatrist, Lester Grinspoon, became interested

in this lack of response, and at the 1962 meeting of the American Association for the Advancement of Science presented a paper, "The Unacceptability of Disquieting Facts," which began:

As nearly as we can determine, the truth with regard to the state of the world is that the very existence of a whole civilization, and perhaps more, is threatened. Yet, judging by people's behavior, it does not appear as though most of them, including both decision-makers and the public, have wholly grasped this fact. If they really believed that their lives and those of their loved ones were threatened, we would expect them to be seething with concern and activity. . . . Are we to believe simply that the facts are not available to people and that the mass media have conspired to hide the truth? tempting to explain the lack of concern by the inadequacies of the mass media, but such an explanation cannot be reconciled with the fact that there is a handful of people without any special resources who fully appreciate the present state of the world.

The fact remained that various people did everything they could to sound the alarm, yet the world failed to listen and respond. Dr. Grinspoon's paper is devoted to explaining why. One important reason:

People cannot risk being overwhelmed by anxiety which might accompany a full cognitive and affective grasp of the present world situation and its implications for the future. It serves a man no useful purpose to accept this truth if to do so leads only to the development of very disquieting feelings, feelings which interfere with his capacity to be productive, to maintain his mental equilibrium.

It is a very common response for a person to deny what he cannot cope with. This is his defense against what would grievously interfere his immediate life and well-being. "Displacement" is another defense. One finds a substitute for the real threat—an "enemy" on whom all such prospective horrors can be blamed. That seems to relieve the pressure. There are many other devices of self-protection against "the unthinkable," and of all these Dr. Grinspoon remarks that "what should be emphasized is their adaptive function, for they are important means by

which people orient themselves in their daily tasks and protect themselves from whatever threatens to upset their routine." Then he says:

It has been argued by some that solutions to the difficult and dangerous problems which beset the world would be more readily found and implemented if whole populations really appreciated the nature of the present risks. They argue further that ways must be found to make people aware, such as showing movies of twenty megaton bursts during prime The consequences of such an television time. endeavor might, however, be disastrous. For if the proponents of such a scheme were to achieve their goal, what they will have done is to have overwhelmed these defense mechanisms and left people burdened with feelings they might have no way of coping with constructively. Contrary to expectations, those activities which they might seize upon could very well result in just the opposite of lessening world tension.

One other point is made by Dr. Grinspoon with a quotation from Archibald MacLeish, and it seems the most important consideration of all. "Knowledge without feeling," the poet said, "is not knowledge, and can only lead to public irresponsibility and indifference, conceivably to ruin." MacLeish said further: "When the fact is dissociated from the feel of the fact, . . . that people, that civilization is in danger."

This quotation makes a kind of watershed in our discussion, because from here on we should like to argue that the other matters considered have only small importance in comparison with this one. This is the reason why the terrible facts presented by knowledgeable and responsible men have so little effect on the population at large. The facts do not relate to the life experiences most people have had, and the level of meanings involved finds them unprepared to give attention to such matters. William Barrett put his finger on the source of the difficulty when he said, in Irrational Man, that "every step forward in mechanical technique is a step in the direction of abstraction," that while the technological advances made possible by the abstractions of science have given man incalculable "power," they have at the same time divorced him from his roots in the

natural world and condemned him to that "lack of concrete feelings that assails modern men in his moments of real anxiety."

There is just no way, suddenly, to generate a feeling of reality for impersonal processes far away from the daily life of ordinary people, now that they are proving so destructive. It does not help, as Wendell Berry says, to "expound" to people what they ought to do, or what they ought to feel. Feeling cannot just be "turned on"—or rather, the feelings that *can* be turned on, of which fear is a principal instance, are the very opposite of the sort of feeling that is needed.

Meanwhile, acting independently, some deep instinct in people is making many of them turn back to the land, as a vague groping, perhaps, for the *feeling* that they hope will restore their fragmented and sometimes shattered lives. This may be the real beginning of feeling what, in their own terms, the ecologists want us to feel, but the undertaking is no small enterprise; it is more like a reorientation of our entire lives. Much more is involved than a course of week-end reading, or holding a wake along the stagnant shores of some polluted lake or river.

To have an effective feeling of reality at a high level of ecological generality requires deliberate schooling in the interdependence of life, ranging from the simple and obvious to the complex and subtle, with cultural reinforcement through forms expressive of reverence for the entire community of being—the work, it may be, of centuries. To set this as an objective—as the common objective for all men—is doubtless the thing to do, but this is the same as saying that we must begin to construct an entirely new civilization, and, if we are honest about it, to admit that we are starting almost at the very beginning. One implication of this admission would be that we have never really known what education for the "whole man" means.

It will be said, of course, that we haven't got *time* to begin all over again, since, according to present predictions, by the year 2000 hardly

anyone will have enough to eat. But what is the meaning of this observation? Does it really say that because we may suffer extreme deprivation in thirty years, we must do something else, something "more effective"? Well, what? What do you do when you cannot afford the time to do what ought to be done? When it is not practical to do the right thing because we want to, or because we feel like it?

The question is now openly metaphysical. For what, indeed, is the *right* thing? Could it possibly be "right" to decide to try to whip and legislate ourselves into a condition of "maturity"?

It is evident that the persuasion in this direction comes from our extraordinary preoccupation with survival. The context of argument about the threat of ecological disasters is almost entirely statistical, putting the problem in terms of millions or billions of human units and what is certain to happen to them if we don't change our ways. Little is said about the human qualities of the people of the future. contention is simply that they should not be poisoned or starve.

But is such an objective so very different from the clamor for prosperity and affluence—the endless "progress" declared to be our collective motive only a generation ago? It seems to say simply that survival is all the "affluence" we can hope for, according to the laws of nature and the predictions of the new ecological economics. Survival is the prosperity of the coming hard times, and let us be thankful for it.

This seems an ignominious approach to trial and difficulty.

How then shall we live? Live in anxiety and unhappy restraint, brooding on the year 2007, when the population of the earth will have doubled—is the answer we get. There is hardly ever a whisper suggesting

the decency and the poised ease of living any day for that day's sake —or the possibility that a life filled with respect and regard for other forms of life, not to say other men, would make a very different earth, and sooner, perhaps, than fear-inspired belt-tightening.

What will happen, of course, will be some kind of composition of both points of view. A new naturalism is in the air. The number of those who are ready to live in fellowship with nature from spontaneous inclination may be greater than Many of the young have natural we think. feelings of care and devotion to the land, and no sense of deprivation when they manage on a standard of living that seems disgraceful "poverty" to the older generation. No one knew, twenty years ago, or even ten, that all this would happen, or that a rich literature concerned with a new kind of life would begin to come into being. This is at least one good thing that nobody was able to predict. There may be some others on the way.

REVIEW THE COMPASSIONATE VIRTUES

IT seems unlikely that anything of lasting value can be obtained by "demanding" it, since what people really long for is not "things," but conditions of being, and these are not transferable, but subtle evolutions. This is the Taoist view, and it is probably reliable.

It is for this reason, perhaps, that little has appeared in MANAS about "women's liberation." The cause of women is certainly just. The customs if not the laws of every country discriminate against women. This is one more case—a very large one, encompassing half the population—in which the powerful take advantage of others. But since power is no remedy for the abuses of power, and justice, no more than mercy, can be strained, a beneficent change in the situation of women will almost certainly come through the development of greater maturity on the part of all human beings, rather than from campaigns for special reforms.

Yet the campaigns for women's rights are today very much under way, and here, as in other campaigns for other just causes, there are valuable by-products. Masculine/Feminine (Harper, Colophon paperback, \$2.45), an anthology of "Readings in Sexual Mythology and the Liberation of Women," edited by Betty and Theodore Roszak, is rich in incidental perceptions. The book has five sections. The first reprints "classics" of masculine vanity and unconscious egotism. Next come essays by intelligent male advocates of the rights of women. The rest of the book-about two thirds of it-is devoted to recent and current expressions, ranging from measured and thoughtful feminism to hysterical diatribes against men. Last is a balanced and comprehensive comment by Betty Roszak.

Among the "greats" who are confident of male superiority are Nietzsche, Strindberg, and Freud. It is appalling to realize that a man as courageous and brilliant as Freud could be so much the prisoner of prejudice. The reader turns with relief to the distinguished allies of women, who include Shaw, Ellis, Myrdal, Ronald Sampson, and Theodore Roszak, after these no longer even plausible intellectual tyrants.

As to the merits of the rest, the reader will have to go to the book and make up his own mind. The common sense and insight of the editors seem its most valuable ingredient. We can, however, devote some space to several useful contributions. First, it is well to recognize that the world was not always dominated by males. Karen Horney says:

From Bachofen's investigations we know that this state of the cultural supremacy of the male has not existed since the beginning of time, but that women once occupied a central position. This was the era of the so-called matriarchy, when law and custom were centered around the mother. Matricide was then, as Sophocles shows in the *Eumenides*, the unforgivable crime, while patricide, by comparison, was a minor offense. Only in recorded historical times have men begun with minor variations, to play the leading role in the political, economical, and judicial fields, as well as in the area of sexual morality. At present we seem to be going through a period of struggle in which women once more dare to fight for their equality. . . .

Basic to the male/female "game" is the play described in the Foreword:

He is playing masculine. She is playing feminine.

He is playing masculine *because* she is playing feminine. She is playing feminine *because* he is playing masculine.

He is playing the kind of man that she thinks the kind of woman she is playing ought to admire. She is playing the kind of woman that he thinks the kind of man he is playing ought to desire.

If he were not playing masculine, he might well be more feminine than she is—except when she is playing very feminine. If she were not playing feminine, she might well be more masculine than he is—except when he is playing very masculine.

It goes on and on, this game, abetted by journalists and merchandisers, and by anyone who

can make a profit out of it—until gross excesses become apparent and a healthy self-disgust begins to be felt by the participants. Then there are revolts, switches to other extremes, and bravenew-world solutions, with various mechanistic trimmings made possible by technology.

In terms of power, however, the contest is not even. The men have the power, or think they have, and the women believe they have, with the result that women's liberation often sounds like no more than a power struggle conducted by women against the Enemy—man. As one exhorter puts it:

Women must learn the meaning of rage, the violence that liberates the human spirit. The rhetoric of invective is an equally essential stage, for in discovering and venting their rage against the enemy—and the enemy in everyday life is men—women also learn the first lessons in their own latent strength. Women must learn to know themselves as revolutionaries. They must become hard and strong in their determination, while retaining their humanity and tenderness.

Such women might learn something from what happens to men who seek mainly to be "hard and strong." Various things happen to them; they practice oppression of women, for one thing; and they seldom retain "their humanity and tenderness." They become especially good at war, and are proud of it.

A passage from Theodore Roszak's contribution should follow here. Were what he says more widely admitted, we would have little interest in books about the war between the men and the women:

Saving the compassionate virtues is *not* the peculiar duty of women. On the contrary; the sooner we have done with the treacherous nonsense of believing that the human personality must be forced into masculine and feminine molds, the better. No matter how lyrically intoned, the notion that women are innately "feminine" and therefore uniquely responsible for the fate of the softer human virtues is a lethal deception. To think this way is to play dumb to the fact that throughout civilized history men have unloaded the nurturing talents on women for base purposes of manipulation and exploitation. Worst of all: it is to continue giving the men of the world a

solid-gold rationale for repressing those talents in themselves and for thus stripping power of its humanitarian discipline.

There, then, is the heart of the matter: *There are no masculine and feminine virtues*. There are only human virtues. Courage, daring, decisiveness, resourcefulness are good qualities in women as much so as in men. But ruthlessness, callousness, power lust, domineering self-assertion . . . these are destructive, whether in man or woman. At this juncture in our history, it is the compassionate virtues that need desperately to be given a new public dignity. But what an act of hypocrisy it would be to pretend that these virtues are to be honored *in women!* Rather, they are to be given reverence *in all of us*, for they *are* there.

If women's liberation in its latest phase means integrating more women into positions of power and prestige within our existing social order, there can of course be no way to fault the movement by the conventional criteria of social justice. Full-scale integration means equality, and against the egalitarian demand there can be no argument—least of all by those who occupy the position of privilege. But the existing social order has been fashioned by compulsively masculine men after their image. If liberated women integrate with that society, what then becomes of the compassionate virtues? Is the place of those virtues still to be in the home, even after the women have departed to pursue careers? Will our political health be improved if half the politically irrelevant homemakers locked away in those homes should be male . . . and half the power politicians female?

At least one of the champions of women's liberation agrees. Gayle Rubin, a student at the University of Michigan, wrote in 1969:

One thing that should be made clear about women's liberation is that it doesn't mean turning women into men. To use the black power analogy, no one wants to obliterate the differences between male and female. Rather the point is to destroy some of the myths about the nature of male and female and find more satisfying role definitions for male and female alike. Moreover, radical women, at least, don't want to become like men in the additional sense that we find so much wrong with the role the American male has to fulfill, both in terms of his relationships with women and his relationships with society as a whole.

How much of the feeling of frustration and confinement in what is called "women's work" stems from the definitions made by men—the men who lead the distorted lives this writer wants none of? Why is going out and getting food so much more glorious than cooking it? What are all those "creative" activities that men perform, but won't let women take part in? If we can ever get our standards of achievement and the good life more intelligently defined, this argument will probably collapse of its own weight. Meanwhile, any man and any woman can at any time stop playing the "game." A movement is not needed for that. Just some serious reflection on the meaning of human life. If it be argued that role-playing is the only way to get ahead, the rejoinder should be that a society which requires role-playing affords no advancement worth having.

As Mr. Roszak says, there is absolutely no argument against the demands of women from the "social justice" point of view. But let us not mistake social justice for the good life. People can give justice to one another, but they can't give a good life to anybody. They can only try to live one, and hope that others will try, too.

COMMENTARY MUMFORD ON "THE FUTURE"

IN his series on the "Megamachine" which appeared in the *New Yorker* during October, Lewis Mumford gave attention to the current scientific vogue of making predictions about the future (Oct. 24 issue). Commenting on a recent symposium on "The Future of Life," in which genetic control of the population was discussed, Mumford remarked:

One thing was notably absent in some of the participants in this discussion: any feeling that those who might be in possession of the knowledge and techniques for exercising such control should be obliged to produce positive evidence of their special fitness for determining the future of the human race.

Speaking more generally, he said:

In this new scientific hierarchy, only one-way communication is maintained. Those who speak with the highest authority on some minute section of exact knowledge too often unblushingly claim the right to speak for mankind on matters of general human experience, on which they can testify only on the same lowly level as other human beings. . . . The worst thing of all about the many discussions of possible technological futures, mainly by the extrapolation of visible tendencies or incipient inventions, is the ingrained fatalism they display. They refuse to allow the possibility of a complete reversal of existing trends—such a reversal as befell the great Roman Empire when it was supplanted by the new Christian institutions, founded on a different set of beliefs. This fatalism characterizes sociological observers like Jacques Ellul, who plainly detests the evils of mega-technics, as well as those who are impatient to hasten the pace even if many invaluable human achievements are defaced or destroyed.

It has again and again been pointed out that technicians trained in the methodology of science have a tendency to limit ideas about the future to what they regard as implicit in the status quo. The very exactitude of their procedures shuts out awareness of tenuous, early processes of becoming, since these can hardly have concrete "objectivity" until they no longer represent the future, but only the past. Really significant innovations in scientific thinking itself are

introduced only with great difficulty, as Thomas S. Kuhn shows in *The Structure of Scientific Revolutions*. Why, then, should scientists regard themselves as especially qualified to anticipate the future or to decide what is "inevitable"? Or even "desirable"? The men who show the greatest insight into what is actually happening right now—men like Mumford, Paul Goodman, and Charles Reich—have cultivated and disciplined minds, but they are not especially "scientific" in their approach—not, that is, unless science is redefined according to the canons proposed by Polanyi and Maslow.

Already, the core beliefs of the best of the coming generation promise to be quite different from those which still govern the behavior of the majority of people. If this is indeed the case, then the present submission to external technological imperatives may soon give way to another sort of response. Goodman thinks a "New Reformation" is now going on, and Reich predicts "The Greening of America" as the result of a new consciousness among the young. These are human factors at work in the process of change, and as they become stronger we may have increasingly manifest demonstrations that men make history, and that the power to resist dehumanization by inherited historical processes is the primary reality in human beings.

CHILDREN

... and Ourselves

WAYS OF LEARNING

ALONG with an exhibition of her own work at a college in San Rafael (California) early this year, the sculptor, Ruth Asawa, showed the work of public school children she and other volunteer artists had taught. She also wrote a statement for posting with the exhibit, in which she said:

As a good gardener must know his plants, so an art teacher must know his craft. I am primarily concerned with art and art education because I have devoted most of my life to the study and practice of art. I have made doing it part of my life. Art is doing. There is either *doing* or *talking about it*. Art deals directly with life. When it is done, someone comes along to write about it; then someone comes along to exhibit it; then someone comes along to buy it. For each step there is someone preparing to make a profession and a livelihood from it.

The only step which is truly real, is the first step: The making of the object. This is the step that children should be involved with completely. This involvement helps them to learn about their capabilities and limitations. It is learning by making. For this reason, the most highly skilled persons should be teaching them. Educators know that if a child has success in one area, it helps him to be successful in other areas. The craft-arts have built-in opportunities to learn by trial and error and to find basic principles. They present a way of learning which can be applied to other subjects. One thing that educators do not understand (with all due respect) is that art can be taught only by artists. If a non-artist is teaching a subject called art, it is non art. If you haven't ever made art, you cannot teach the making of art. It is as simple as that.

We print this statement, and are grateful to the reader who supplied it, not because it is a new idea, but because it is extremely important and needs to be said over and over again, and because Miss Asawa says it so well. There is a little more:

A Zen Buddhist calligraphy master repeatedly told us, "Follow the instructions of a good teacher. Watch, work every day, and don't talk too much." When an adult student impatiently asked him, "But when can I do my own style?", his reply was, "Don't

worry, your style will take care of itself. Just learn to use the brush."

If you are here to train art teachers, *that first step is essential*. That first step is the doing. Every art student should apprentice himself to a craftsman for the duration of his studies in order to understand the *doing part of his craft*. Art must be taught by craftsmen who know their craft.

I realize that this form of learning might present practical difficulties in college. An alternate to apprentice training is for colleges to provide workshop training where qualified artists (who like teaching) are the teachers. It is not enough to be an art major, much less an art minor. Art students, to teach, should spend *most* of their time in workshop courses where *art is made* and not just talked about.

I repeat again: The crafts have built-in opportunities: they offer learning by trial and error; learning basic principles essential to staying alive. Doing is living. That is all that matters.

In the same mail from the same reader came some other material—on gymnastics and walking. The article on gymnastics is a short account of the evolution of physical culture activities in America, beginning with exercise programs in the public schools after "a wave of public concern about underfeeding and lack of fitness of thousands of Army volunteers." This was in 1908. The writer, Jean Whitehead (in the Christian Science Monitor for April 26, 1969), tells how the influence of remedial Swedish gymnastics became popular through American schools, while German methods created the competitive sport that was eventually included in the Olympic games. Today, rigid "command-response" methods of instruction have given way to informal procedures:

Many teachers direct children's attention to their kinesthetic sense. The child can thus become sensibly aware of the position of his body and can practice controlling his movements efficiently in widely differing situations . . . The work is built on natural activities and on what each child can do. The child works at his own ability level and progresses at his own rate.

This sounds like progress, but one may still ask: Breathes there a man (or woman) without memories of extreme boredom during time spent in physical ed? It is not, perhaps, fair, to compare the work of these conscientious and progressive teachers with what a grown man did with himself, recently, yet the temptation cannot be resisted. The other story sent in by our reader begins: "What happens when you turn a middle-aging, soft, non-walking deskman into a full-time hiker?" Sore feet happen to him, is one safe answer, but that lasted only two weeks. Articles in the San Francisco Examiner & Chronicle (July 19 and Aug. 16) report the experience of Don Engdahl, who decided to walk all the way along the coastline of California from the Oregon border to Mexico-a hike amounting to 1200 miles. After completing 400 miles, he wrote: "The most startling development, so far, is the direct line of communication that has been established with what seems like every cell in my body."

Under ordinary—which for most of us means unnatural—conditions, the hungers or specific appetites of the organism are by no means a reliable guide on what one should eat. But Engdahl, in a few weeks, apparently accomplished re-education of his physical wants to the point where they became utterly reliable. He found that when he needed fats, his body told him. When rice seemed the thing he wanted, he ate it and found what he needed. He proved his hunches about his diet, one by one. He lost little weight, but the pounds moved around, mainly away from his waist. Even his idea of a stimulant changed, without any particularly ascetic intentions: "I've long been a coffee man, but now I find that it is too sharp a stimulant; am drifting toward tea and bouillon."

Mr. Engdahl's report is a light-hearted affair, but basic matters come in naturally. This is surely a great way to learn about California. Walking on the shore instead of driving along Highway 101, he discovered beaches and headlands he didn't know existed—and he found out about history, too:

Up north, it was largely the skeletal signs of shipping ports that once were. Further south, the influence (mostly Spanish) of ship-borne commerce becomes a dominant theme. Always, California's roots show clearly on the coast.

And the sea life—good grief, what abundance! As with most of us, I'd become quite territorial in my ocean-going, never wandering far afield. Only when

I had the freedom to go around that rocky point there to the south—and keep going—did I begin to really appreciate the wonder and variety of the near-shore sea creatures.

There was so much to learn, such as the difference between judging distances behind the wheel of a car, and on foot. Then there was the taste of water gushing out of a rock, still—almost unbelievably—unpolluted! He experienced a gradual conversion to the pleasure of simplicities:

. . . one finds a sort of natural level of primitivity one will tolerate. . . . I rarely build a fire any more—even when possible on the up-tight central coast. Reasons: My little gasoline-fired stove . . .—though pretty and comfortable—seems to isolate me from the night world on the beach.

Engdahl carries his backpack, two cameras, usually a paperback, and tries to sleep on the beach within hearing of the surf. Most important, probably, are the psychological changes he experienced, in the feeling of loneliness, for example:

Loneliness is a state of mind, of course, but also of surroundings. One thing is that the shore is so rich in life and sound; the fantastic number of creatures that live in the inter-tidal zone, the tremendous variation in the surf; it keeps the interest as no inland territory could.

There seems a very close relation between what Ruth Asawa says and what Don Engdahl did. One can imagine a time or a society in which education would be pursued on hikes of this sort—a wonderful, improvised, and wholly spontaneous affair, yet having a "method" that really works. The first step in this direction would be to recognize how artificial education must be without such intensities to give the content meaning that is *felt*, and to stop pretending that formal, bookish substitutes could ever be as good. The next thing to do would be to undertake the slow development of a social community wholly hospitable to such undertakings.

FRONTIERS

For Cultural Revolution

CREDIT should be given to *Time* for compiling valuable reports on ecology and economics earlier this year. The Feb. 7 issue has a long review of ecological disaster, "Fighting to Save the Earth from Man," which gathers into a few pages essential facts collected by many researchers; and "Economic Growth: New Doubts About an Old Ideal," in the March 2 issue, exposes the follies of what Walter Weisskopf has called GNP "fetishism." Time's publication of these articles, you could say, suggests that a great many Americans may soon be ready for far-reaching changes in their habits, or are at least seriously contemplating the necessity of a reduction of wants and the desirability of a new conception of "the good life." In a summarizing paragraph, the March 2 article said:

The feeling is prevalent in the U.S. that citizens are lost in an increasingly impersonal society, surrounded by a thicket of machines and trapped in cities that have outgrown human needs. America's new Thoreauvian yearnings are reflected in the trickle of the discontented out of the cities and back to small towns, even at a sacrificing of salary or job promotion. Many middle managers now baulk at transfers from field offices to corporate headquarters, especially in Manhattan, which was once considered an executives' Golconda.

The new skepticism about material growth contains traces of Jefferson, who detested cities, and Gandhi, who was suspicious of much modern technology. Current attitudes also stem from what Historian Daniel Boorstin calls the nation's "tradition of self-liquidating ideals." In a paper presented to the House Committee on Science and Astronautics, Boorstin wrote: "Perhaps more and more Americans, surfeited by objects, many of which actually remove the pungency of experience, now begin to see the ideal—the ideal of everybody having the newest things—being liquidated before their very eyes. Perhaps the annual model has begun to lose its charm."

There can be no doubt that a vast change in the taste and objectives of Americans is now going on—well typified in some of its aspects by the rejections of the younger generation. The country may soon be both willing and compelled to abandon its "always more" theory of progress, even if, as *Time* remarks, "The idea violates all the tenets of local boosterism." Constant growth economics can defend itself only by ignoring the ever plainer fact that the resources of the planet are finite, and may soon be exhausted by present rates of consumption, and by refusing to admit that there is a practical limit to the amount of waste and pollution that can be poured over its surface.

These realizations are coming to Americans. But what about the rest of the world—the part of the world that has never had a chance to experience the "surfeit" Daniel Boorstin talks about? How can people rebel against being overfed if they've always been underfed—as in, say, Latin America? The comparison produces inevitable ironies. A "test-tube" case of this contradiction comes in a report in Liberation, a few years ago, of a conference on education held at the (New York) Lower East Side Action Project (LEAP), in which Paul Goodman, John Holt, and others participated. Up for discussion was how to help the ambitious young Puerto Ricans who are discriminated against in the public schools, being told by faculty advisers to learn auto mechanics in preference to seeking places in professional ranks. This, the project supervisor maintained, was unjust. The aspirations of minority groups for advancement should not be suppressed. But Goodman said:

I feel we have a lot of kids here who have the same kind of garbage in their minds that any kid in Yale or Harvard has. They have the same ambitions, want to climb up the same way, and who needs it?

Goodman, you could say, was both right and wrong. A lot of the "kids" at Yale and Harvard would now agree with him—but they *can* climb up if they want to. The Puerto Ricans can't, or find it extremely difficult to get past racist barriers.

This situation recalls the appeal made by ecologists of the advanced technological countries to new African nations to control the pollution they are about to inflict on the landscape through their own industrial development. Spokesmen for these countries quite naturally reply that they are only now beginning to make the desirable commodities that all their people want, and why should *they* be so careful about pollution, when Europe and America have not yet taken major steps toward control. We don't have much of an answer for these people.

Perhaps we had better leave all such answers to Latin Americans, or at least to persons who live and work there. One such man, Ivan Illich, who heads the Center for Intercultural Documentation in Cuernavaca, Mexico, deals with the problem in a frontal attack on conventional ideas about education in Latin America. The education—even the higher education—in those countries, he maintains, is little more than propaganda for the old ideas of "progress." In an article in the *Saturday Review* for Oct. 17, "The False Ideology of Schooling," he says:

Both the purveyors of development and the preachers of revolution advocate more of the same. They define more education as more schooling, better health as more doctors higher mobility as more highspeed vehicles. The goals of development are always and everywhere stated in terms of consumer-value packages standardized around the North Atlantic. . . . Present development goals are neither desirable nor reasonable. Unfortunately, anti-imperialism is no antidote. Although exploitation of poor countries is an undeniable reality, current nationalism is merely the affirmation of the right of colonial elites to repeat history and follow the road traveled by the rich toward the universal consumption of internationally marketed packages, a road that can ultimately lead only to universal pollution and universal frustration.

Illich demands the right to freedom from schooling of this sort, to make time and space for learning "a new language, a language that speaks not of development and underdevelopment but of true and false ideas about man, his needs, and his potential." As for the industrial "goodies," he is

not much interested in such things, being content to point out that there will never be enough to go around, and that all that more conventional schooling can accomplish is "the modernization of poverty." Meanwhile, he says, present Latin American claims about advances in education are a kind of fraud:

Bolivia is well on the way to suicide by an overdose of schooling. This impoverished. landlocked country creates papier-mâché bridges to prosperity by spending more than a third of its entire budget on public education and half as much again on private schools. A full half of this educational misspending is consumed by I per cent of the schoolage population. In Bolivia, the university student's share of public funds is a thousand times greater than that of his fellow citizen of median income. Most Bolivian people live outside the city, yet only 2 per cent of the rural population makes it to the fifth grade. This discrimination was sanctioned in 1967 by declaring grade school obligatory for all-a law that made most people criminal by fiat, and the rest immoral exploiters by decree. In 1970, the university entrance examinations were abolished with a flourish of egalitarian rhetoric. At first glance it does seem a libertarian advance to legislate that all high school graduates have a right to enter the university—until you realize that fewer than 2 per cent of Bolivians finish high school.

Mr. Illich's position: "It remains the task of the cultural revolutionary to overcome the delusions on which the support of school is based and to outline policies for the radical de-schooling of society. . . . Cultural revolution is a reviewing of the reality of man and a redefinition of the world in terms that support this reality." Ivan Illich is a former Catholic priest. Some of his redefinitions, apparently, were found unsatisfactory by the Church.