

## THE CONTEXT OF LIFE

A BRIEF report in *Audubon* for September (*Audubon* is the organ of the Audubon Society) speaks of a present change in climate which seems ominous for future agriculture throughout the world. It is the consensus of atmospheric scientists that—

recent droughts in the Sahel [the region of several African countries bordering on the Sahara], in India and elsewhere in the tropics, as well as the shortened growing season in Soviet wheatlands, are not aberrations and must now be considered the norm. The northern latitudes are cooling and southern latitudes are warming, with consequences for world agricultural production that may be disastrous. Over the next several decades, the scientists calculated, one billion people will die of starvation unless patterns of consumption in the wealthy nations are markedly altered. Consumption of meat—so extravagant of protein—may have to be cut by more than half.

Meteorologists are sometimes mistaken in their predictions, but what if, this time, they are right? It is difficult, in such circumstances, not to think of one's own land and prospects. No doubt Americans will anticipate that the pinch will first be felt in other countries. America has vast agricultural lands and advanced methods for obtaining high production.

There is, however, another set of forces which may affect American agriculture. It is frequently pointed out, these days, that the industrial farming pursued in the United States has become increasingly dependent upon petroleum. Not only do tractors and other farm equipment run on oil, but petroleum is the source of much of the fertilizer used to stimulate production. It follows that, as the price of oil goes up, food prices must also go up. There seems no escape from this result. Nor is there any escape from the fact that there is a limited supply of oil in the world. America does not now produce enough oil to supply the nation's needs, as everyone knows.

And the oil-exporting countries—mainly the Arabs—are unwilling to exhaust with increasing rapidity the resources which bring their only substantial income. Since 1960 the Arab countries have been appealing to the oil-consuming nations to mitigate their demand for oil. Spokesmen for OPEC (Organization of Petroleum Exporting Countries) have pointed out that, at the present rate of oil consumption, they will have no more oil in twenty or thirty years—and in some areas exhaustion may come sooner. They would like at least fifty years of continued oil production and sale—to give them time to evolve some other means of livelihood. Obviously, their customers have not been responsive to this appeal; in fact, oil consumption in Europe and the United States is likely to increase until shortages suddenly impose a ruthless change on everyday living habits in these regions.

This is the analysis given by E. F. Schumacher, who recently visited the United States on a lecture tour. He also pointed out the dependency, not only of agriculture, but of our great cities, on petroleum. The enormous urban centers of the present have become possible only through the availability of oil used for transport. The people in the cities could not be fed without the gasoline to move the great trucks which bring produce to city food stores. So, the pattern is set—frozen in massive urban structures. And one can readily see how difficult it is to contemplate a major change in these interdependent economic relationships. What would happen to the industrial, commercial, and marketing processes of the nation if an attempt were made to set the clock back, say, fifty or seventy-five years, in order to accomplish a practical reduction in the amount of fuel required to feed and house the still larger population of the future?

No one can tell, today, how serious the change in the weather will be for future agriculture. No one can be sure about when the diminishing world supply of petroleum will become a serious threat to human well-being in the United States. But practically everyone can be sure of the fact that simply staying alive is going to cost more and more. The expectation that technology will be able to "solve" our energy problems commonly ignores the inevitability of ever rising costs—which may reach a level where severe reduction in what we term our "standard of living" will affect a vast majority of the population.

These are quite practical questions. Should we, then, give them primary attention? What sort of priority remains for considering the principles "that may be capable of supporting intelligent idealism under the conditions of life in the twentieth century"? If the "conditions of life" are going to change, shouldn't we think about them before anything else?

The question implies that if we have urgent "economic" problems, it is necessary to devise economic solutions. This may not be the case. Economic solutions mean technical solutions, but what if our problems have causes which are not technical at all? What if they result almost entirely from the misuse of technique?

In a paper on "Meta-Economics" contributed to the volume, *Beyond Keynes*, edited by Joan Robinson, Dr. Schumacher shows how the methodological generalizations of economics have been translated into "laws of nature." At the root of conventional economic theory is an assumption about human motives:

First, there is a generalization, such as: "In general and most of the time the individual strives naturally for the accumulation of money and riches as ends in themselves." No generalization tells the whole truth, exceptions, as the saying goes, prove the rule; they have to be "borne in mind" but cannot be incorporated in our science. To get rid of them there is the easy and convenient method of turning the generalization into an assumption: "Let us *assume*

that individuals invariably strive for the accumulation of money and riches as ends in themselves." We now have a firm basis on which to erect our economic theories, and as the theorizing proceeds, the assumption imperceptibly turns into an assertion, not perhaps directly but indirectly, as in the proposition: "If we take action A the result will be B, *because* individuals invariably strive for the accumulation of money and riches as ends in themselves." And when this stage has been reached, it is not long before the assertion turns into a norm, not, of course, by saying that people *ought* to strive for the accumulation of money and riches as ends in themselves, but by suggesting that to do so is the only rational mode of behavior. People who behave irrationally, i.e., not "economically," are not to be taken seriously; they are either uneducated or they suffer from a defect of intelligence or character. You cannot base economic policy on the behavior or predilections of eccentrics, cranks, perverts, misfits, or dropouts.

This is the attitude to which thinking in exclusively "economic" terms leads, and which requires meta-economic thinking for its correction. Why is this correction important or desirable? Because, if the conditions predicted for the fairly immediate future will require great changes in our habits and behavior, then we shall certainly need to make changes in our attitude first. Merely economic persuasions will not work for the reasons given by Dr. Schumacher at the conclusion of his paper:

The attempt to describe and eventually to control the economic activities of human beings by means of econometric models necessarily requires a ruthless and extreme simplification of the picture of man. Man is seen either as a mechanical robot, whose reactions are ascertainable and predictable like those of mindless matter, or as a "rational" *homo oeconomicus* solely concerned with material self-enrichment. Neither of these two pictures bears the marks of *humanity*. An economic teaching built on such a basis cannot possibly be helpful in solving the economic problems now oppressing us, and I would go so far as to say that the intensive study of such a teaching, although it may in some respects be useful, does considerably more harm than good. For every man in the course of his life, becomes what he thinks, is formed by his thoughts. If what he thinks is narrow and unreal, he himself becomes narrow and unreal.

This gets to the point. If we approach our problems as something economic science can solve, then we shall be behaving in exactly the way we have behaved in the past. Economic man is helpless to change, *as* economic man. Even prudential considerations applied toward "conservation" do not work, as Aldo Leopold shows in the concluding chapter of *A Sand County Almanac*. After describing the failures of conservation based upon economic calculations, he says:

It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for the land, and a high regard for its value. By value, I of course mean something far broader than mere economic value; I mean value in the philosophical sense.

Now the question arises: How do people achieve a sense of value "in the philosophical sense"? Well, Schumacher says that people are formed by their thoughts, that they become what they think. If this is the case, then the content of our minds—what we occupy our thoughts with as real, as enduring, as having value—is crucial to the problems which lie before us. While our problems seem to *hurt* us at the economic level, they did not originate at the economic level: they began with what we have thought about ourselves.

We need not say that this talk of philosophy is all very fine, but that the patterns of practical human behavior have always been the same and are not likely to change. This is simply untrue. The assertion that economic (acquisitive) motives have always ruled human life is false, as can be easily seen in the historical studies of Karl Polanyi. People have thought of themselves quite differently, and have conducted their lives on a very different basis.

Why, then, should we allow modern "progress" to stand in the way of finding a better foundation for our lives than the one that is proving so unsatisfactory, indeed, so threatening in all its implications and practical effects?

There is a region of our existence where another conception of human life is to be found—where the practical is subordinated to the philosophical—and where dwell those qualities that we identify with civilization. We have very nearly lost sight of those qualities in recent years. In his essay, "Civilization and the Arts," W. Macneile Dixon gives the arts a high meaning that is seldom encountered, these days, yet one with immeasurable restorative value for our impoverished civilization:

There is, as everyone knows, a province of human life—and only upon reflection do we perceive how vast, how boundless is that province—to whose interests and problems the most extensive knowledge or control of nature's machinery affords no entrance, a country upon which the-bright sun of science sheds not a ray of light. It is the country of the soul. We have our affections and sympathies, we have loves and friendships, we have hopes and fears and admirations inmates of a province of real things as broad and deep as the telescopic heavens above our heads. Of these things science never speaks. She sits above the battle and has no share in our joys and sorrows. Of good and evil, freedom and justice science has nothing to say. The scientific vocabulary does not include such words as beauty or heroism, nobility or charm, resignation or despair, kindness or generosity, character or conduct. Not until you ponder such words do you perceive how narrow and inhuman is the view that omits them, the internal experiences with which our minds are so continuously occupied from the cradle to the grave.

Dixon invites to no casual undertaking. When he speaks of the arts, he means the arts as practiced by such men as Blake, who made temporal celebrations of eternal things. What were poetry, painting, music to Blake? For Blake, Dixon says, they disclosed a depth and mystery in the world beyond all physical investigation:

They should be regarded as windows into the transcendental world, invisible to mortal sight, presenting wider prospects, a vision of beauty in closest correspondence with the aspirations and affections of mankind. They were, in William Blake's own charming phrase, "three powers in man of conversing with Paradise."

Why don't we, then, speak of Religion instead of the arts? Paradise is a "religious" goal. Well, religion is thought of as a settled category: we imagine we know something about it, since there are so many religions in the world. Yet if, as seems likely, religion is a name for the multitude of facets of our ignorance about spiritual things, the word is of little use in the shorthand of brief communication. To speak of "the arts" may be almost as misleading, yet we can go to the work of individual artists without needing to rely on the sluggish and exhausted beliefs of past religious tradition. No doubt a man is as much on his own in religion as in the arts; no doubt the highest content of the arts is religious; but to invoke religion, today, could have the effect of directing attention to easy belief. Belief alone is no path to truth or freedom. And, quite evidently, the men who discover religious truth by the strength of independent inquiry seem always to outrage the "religious" people of their time.

Dixon puts his advocacy well:

The world at large is not interested in ordinary men who go the way it goes, however successfully. It is interested in men who go their own way, artists, poets, dreamers, who are without common sense, but have some kind of uncommon sense, which startles and kindles the mind of the observer. . . .

When you rule out all evidence save the evidence of material things, supplied by the five bodily senses, "The universe belies you and your heart refutes a hundred times the mind's conceit. In this matter Blake was disturbed by no doubts no hesitations. As when, for example, he said of Flaxman's death, "I cannot think of death as more than going out of one room into another." Refusing to accept a mechanical universe, mere physical phenomena, as the final truth, the reality of all realities, he held a very different creed.

It may be time to do away with the charges and the counter-charges in respect to science and technology, and give our attention to those areas of individual awareness which we allowed science to displace. Again, Dixon has breadth of expression:

If science, then, has not carried the banner of progress to the heights we hoped to climb, the causes of our discontent are not far to seek. We asked her to perform an impossible task to which she never addressed herself, and with which she was not concerned. In her own and chosen undertaking, the study of nature and of our material surroundings, the successes of science have surpassed all expectation. The failure was not hers but ours. It was a cardinal error to assume that she could make any substantial contribution to the improvement of human nature, or to the elevation and refinement of human character or human conduct. Intoxicated by the conquests of physical nature, we supposed them sufficient for all our needs, and in our exultation forgot the simple truth that man is not merely a reasoning being, that knowledge of nature's ways does not satisfy his heart, nor does a purely intellectual diet feed his moral and spiritual being his ideals, aims, and aspirations.

C. P. Snow's claim, in *The Two Cultures*, that "Industrialism is the only hope of the poor," has some truth in it, but is now largely irrelevant. The scale of modern industrialism—its uncontrolled appetite, and its irrational proliferation in all directions—now threatens to reduce practically everyone to poverty or need by the end of the century. And it is not enough to declare sagely that we must learn the "right use" of technology. This goes without saying. The question is rather—how shall we learn to *think* in a manner that will make the right use of technology seem desirable, and even the most natural thing in the world? There are doubtless dozens of blueprints showing a better use of science and technology than their present application, but we usually regard these recommendations as requiring severe deprivation.

Where shall we look for such lessons in thinking? Should we investigate "the behavior or predilections of eccentrics, cranks, perverts, misfits, or dropouts"? But these epithets come from the language of the existing orthodoxy—the language and the thinking we are resolved to put aside. Our difficulty is mainly that we hope for the same sort of certainty in an alternative kind of thinking that we have enjoyed in scientific calculations and their technological applications.

This is the exactitude of standardization, of uniformity, of predictability, and of single-valued thinking. The thinking we need to adopt, little by little, is the independent thinking of individuals—without certification from any authority, guided only by those inner disciplines which for the artist (who may here serve as a model) become his sense of limit, his recognition of fitness, his insistence upon a fineness of form—in short, by what is for us an *educated* voice of conscience. A company of conscientious men makes an illuminated community. Such communities are the seedbed of civilized society.

We are speaking, we suppose, of what might be called a consensus of human enlightenment. How else should we speak of it? The outlook has some uniformity, but agreement is reached spontaneously, never by plan. So the advocate of philosophic reform—the man who speaks in the language of Blake, of Tolstoy, of Buddha, or Socrates—is at a serious disadvantage when invited to explain what will take the place of scientific certainty. He has no similar certainty to offer—and perhaps no ordinary certainty at all.

This advocate speaks to us in the idiom of self-discovered truth. Should he try to imitate the precise language of science, he soon becomes a dogmatist, which makes him guilty of the greatest possible offense against the spirit of religion—worse by far than mere materialism, which is only honest skepticism or unbelief. Dogma is an attempt to standardize what is by nature unique, without duplicate, and unrepeatable, save at a distance in the mortal ephemera of the arts. The arts do not pretend to reveal religious truth, although they may supply its most representative symbols. In the discipline of the arts, we may find suggestive analogies of what is involved in the independent pursuit of religious and philosophic truth.

Little wonder, then, that the greatest of religious teachers, Buddha and Christ, refused to write anything down. They left such tasks to their less illustrious followers, as a way of guarding

against slavish belief. Unfortunately, such measures do not always work in the way that is desired.

Dixon used the arts to suggest our need for becoming, as Nietzsche put it, entangled "in the infinities." The arts are purposefully vague, as well as naturally so. Dixon's justification may make our conclusion:

When you enter the temple of the arts you enter a building dedicated to the Muses, and the soul is there disturbed by a sense of how great and terrible, how strange and beautiful is this universe of ours. Make human life as trivial as you please, there remains the simple, positive, undeniable fact among other facts—the eating, drinking, walking and talking—that we are taking part in cosmic affairs, of a magnitude beyond all imagination to compass or language to express. All finite things have their roots in the infinite and if you wish to understand life at all, you cannot tear it out of its context.

## *REVIEW*

### BLAKE'S ASSETS

HAROLD GODDARD was a teacher with whom is needed only the briefest encounter to make one wish one had gone to school to him. He taught English at Swarthmore for thirty-seven years. When he died in 1950 he left behind, in the press, a wonderful book, *The Meaning of Shakespeare*, which was published the following year by the University of Chicago. It is of course in (paperback) print, and should always be.

We have before us the Pendle Hill Pamphlet by Goddard, *Blake's Fourfold Vision* (Wallingford, Penna, 70 cents), which has twice been noticed in these pages, and could be reviewed a dozen times more without exhausting its possibilities. Blake is held to be obscure, but for Goddard he seems an open book. That is, Blake needs to be read with a powerful but controlled imagination, and then he becomes clear. The explanation Goddard gives of Blake's "single vision," and then of double vision, will illustrate this sort of reading.

Single Vision is simply ordinary physical sight, the eyesight of the average sensual rational man. Everyone remembers Wordsworth's Peter Bell:

A primrose by a river's brim  
A yellow primrose was to him  
And it was nothing more.

That is single vision. We might call it Peter Bell vision. The man who believes that a man is a man, a tree a tree, that the sky is blue and grass green, a foot twelve inches long and a minute sixty seconds, that you can find the essence of things by measuring and weighing them, to whom Hesiod's statement that a half is greater than the whole is nonsense, in short, the hard-headed commonsense man to whom things are what they are seems in a state of single vision, or Newton's sleep, in the prison of his senses or his reason or both.

But escape from this prison, take note, comes not by rejecting the senses but by purifying them, not by rejecting reason but by subjecting it to the imagination.

What then is single vision? It is the eighteenth-century world view, born from Newton's cosmos—although it was more the cosmos of Newton's champions and successors than of Newton himself. Single vision sees only the matter-of-fact world of pluralistic reality—established for modern thinkers by the casual stroke of William James's scimitar. It is the "vision" of Robbe-Grillet, the novelist who fears the metaphor more than dragons and sorcerers, who would have a tree a tree, a door a door, and have them stay that way.

But there is also double vision:

One day a man is standing in front of a fire. He has looked at a fire before and thought it was just something that was red and leaped up and burned if you touched it. But today he notices how it was started by a spark from another fire, how, given fuel, it mounted up, burned hotly, began to subside, sank to embers, then into ashes, and, to all appearances, was gone, and suddenly he thinks: *My life is like a fire*. He has achieved a simile. But he doesn't stop there. Now he feels a kindling and a warmth inside himself and he cries: *My life is fire*. He has achieved a metaphor. From this it is but a step to the omission of the "is." Life and fire have become synonyms. He can never feel one without imagining the other. He has achieved a symbol, a poetic image. With this hint he begins looking around him and realizes, astonished at his former blindness, that as still water gives back the image of his face, so everything around him gives back the image of his life: the path that goes up the hill and then down, the unseen wind that sails his boat, the tree that is two trees, one going down into the earth and the other up into the sky, the brook flowing past, always the same, never the same. "All things transient are but symbols," says Goethe. "I caught two fishes, as it were, on one hook," is Thoreau's homelier way of putting it. This is Blake's *Double Vision*.

Here we see Goddard's imagination at work. He takes off on his own. He has to leave Blake in order to understand him. What is "understanding" Blake? It is making him your own, no longer only Blake. One might argue that, if Goddard is explaining Blake, he has no business dropping him and going off on his own. But this is precisely what must be done with a man like Blake. Blake

reached beyond himself, and to find his meaning one cannot simply follow his path, which was very private, but take off on one's own, without fear and without regret. Then, out there—or *in* there—one may encounter another of the innumerable Blakes—more by elevation than by design. It doesn't much matter how it happens. It wouldn't have mattered to Blake. The conjunction will sooner or later occur.

Blake wrote of fourfold vision, but here we are able to speak only of the first and the second. Goddard wants to be sure his readers recognize that Blake was exploring a more than "imaginary" structure:

Now the entire value of what I have been trying to say will turn on whether I can show you that these types of vision are not arbitrary inventions of Blake or even special gifts of his genius, but that they fall, however rarely, incipiently, or fragmentarily, within the experience of us all, and that wherever a man may happen to be on that ladder of vision, he is alive to the degree in which he is bent on climbing higher up it.

Years ago, after reading Thoreau's literary criticism of Thomas Carlyle, we concluded that there is really only one useful way of discussing a work of art, and that is by creating another work of art for the purpose. It may be modestly humble, but it must be a work of art. That, at any rate, is what Goddard has done in this pamphlet. He takes certain lines of Blake, examines them, then turns to certain events in Blake's life, making them illuminate the whole. He can hardly do more than this in thirty-eight pages.

One key event occurred when Blake, a boy of eight or nine, came home and told his parents that he had seen a tree full of angels. His father was going to thrash him for this "lie," but his mother saved him. Blake, says Goddard, became what he saw. He became a kind of angel. He did this by acting on what he saw. His vision became the motive of his life; what he saw was his destiny. Goddard says:

The world is full of plans and programs and proposals for progress, for something better, but what

we need, to strengthen our faith, is an actual sample of something better. "No longer talk at all about the kind of man that a good man ought to be," says Marcus Aurelius, "but be that man." "Where are the great and wise men," asks Jung, "who do not merely talk about the meaning of life and of the world, but really possess it?" Blake was one of those rare men. Obscure, almost unrecognized, often close to poverty, he went quietly ahead consecrating himself wholly to his work as a poet and creative designer and engraver, upheld by the faith that he was speaking "to future generations by a Sublime Allegory."

"Blake's life and writings," Goddard says, "fall naturally into the phases of Innocence, Experience, Revolution or Rebellion, and Vision." Probably these phases are related to the fourfold vision. In any event, when Blake's symbolism is understood the reader knows in which phase he is writing. Blake takes the truth of each phase, discards its delusions, and raises the truth to a higher level. Surely this is why we cannot let him go, leave him back in the eighteenth century. He speaks to us from the heights, even today.

Another decisive event in Blake's life came in his forty-sixth year, when he was living at Felpham under the patronage of William Hayley, who brought him steady work and income. One day Blake came home and found a drunken soldier in the garden. Blake grabbed him and marched him out and down the road. The soldier, feeling vindictive, got Blake arrested on a sedition charge, but he was acquitted. This happening, Goddard thinks, precipitated a change in Blake's life.

For the past several months he had been weighing a supreme decision. Should he go on taking orders and doing hack work for Hayley and have plenty to live on, or should he go back to London, to poverty and freedom? Now a garden is always and everywhere an emblem of creation, and a soldier is an emblem of authority. It was not a drunken soldier, it was William Hayley in symbolic form whom Blake, without knowing it, ejected from his garden and pushed down the road. Soon after, he left his patron and returned to London, fulfilling words he had spoken of Hayley a few months before: "He thinks to turn me into a Portrait Painter as he did

poor Romney, but this he nor all the devils in hell will never do."

And so this little drama of the dragoon becomes as parabolic as Christ's driving the money-changers from the Temple. Keats is right: the life of a great man is a continual allegory.

*There is a drunken soldier in the garden of the world at present.*

Goddard *had* to add this comment about the present world to be true to Blake. Not to point out relevances would be—not leaving Blake behind, but failing to keep up with him.

After returning to London, Blake became "that rare phenomenon—a happy man," says Goddard. Then he tells about Blake's death:

When Blake knew his end was near, he said to his wife, "I have no grief but in leaving you, Catharine. We have lived happy, we have lived long, we have been ever together, but we shall be divided soon. Why should I fear death? Nor do I fear it. I have endeavored to live as Christ commanded and I have sought to worship God truly in my own home when I was not seen of men." When his wife did some little service for him he said suddenly, "You have ever been an angel to me. I will draw you." And he did. Shortly before his death he broke out into singing. Then he said to his wife that he had been wrong: he was not leaving her, he would always be near to care for her. After that he was still. He died so quietly that the exact moment could hardly be determined. Notice: he spoke words of love and unconscious poetry, he drew, he sang, he showed faith, he was silent. "I am certain of nothing," said Keats, "but of the holiness of the Heart's affections, and the truth of Imagination." Blake's last hours centered around those two certainties.

And this is the man they called insane—or at least a bit mad. No. A madman doesn't make the simple-hearted industrious worker Blake was. A better way to put it is to say that Blake had the assets of insanity without its liabilities. And that isn't insanity. It is genius.

**COMMENTARY**  
**"SOMETHING BETTER THAN ART"**

A CHAPTER in the just published collection of essays and papers by Harold Goddard—*Alphabet of the Imagination*, Humanities Press—deals with the work of W. H. Hudson, author of *Green Mansions*. It has to do with Hudson's feeling that any specialization is confining to the human spirit. Goddard says:

Art to Hudson is an inadequate organ for the expression of man's full wonder in life and the beauty of life. He seeks, and seems to sense the coming of, "something better than art, or at all events more satisfying, not only to the artistic-minded person and to those who specialize in some form of art, but to people generally—to everyone."

One thinks, here, of John Keats's musings on the failure of human beings to reach beyond their personal purposes to the disinterestedness of Jesus. Poetry, Keats said, celebrates the energies of men in pursuit of their ends, but that "is not so fine a thing as philosophy—For the same reason than an eagle is not so fine a thing as a truth." Hudson was an incomparable artist, yet Goddard finds in his last book, *A Hind in Richmond Park*, a yearning for more direct human expression:

Hudson distrusts the power of the artist, as he does that of the scientist, to see things in their right relations, for the artist like the scientist is a specialist. And to specialize, says Hudson, is to lose your soul. They alone can be trusted to see who have no profession, no vocation which absorbs their attention. Of such perfectly untrammelled, emancipated persons, he believes there are not a few, though at present they are mainly reticent and inarticulate. But their existence is the evidence of profound evolutionary changes in the human mind—or in certain human minds: the promise of a time when the artist (to still call him that) will no longer use such crude media as clay and pigment and the rest, which after all are like mere toys, but will express life through the medium of life itself. . . .

Since our publication date for this week falls on December 25, it seemed well to take note of the rare quality of those human beings who, from time to time, give evidence of "profound

evolutionary changes in the human mind," and who are willing, out of the disinterestedness Keats admired, to overcome their reticence and to "express life through the medium of life itself."

## CHILDREN ... and Ourselves SCHOOLS AND PROJECTS

A FEW years ago we printed here an article called "Factory Schools." The idea grew out of an experiment carried out in a local print shop. After hours, a portion of the shop was used by a professional designer to hold a class in graphics design. Attending were two apprentices who were learning printing as part of their training as graphics designers, and other young people interested in design. In time the class evolved into a general course in drawing.

Everybody learned from this experiment. The teacher learned that allowing persons to enter the class on too casual a basis could be demoralizing. The students—some of them—discovered talents in themselves that were both exciting and useful. The graphics majors, after relating their work to an actual printing operation—including both letterpress and lithography—said that they learned more from a season in the shop than from years of college. Their enthusiasm probably exaggerated what they gained, but meeting and solving real problems made for an intensity of experience seldom encountered in any school.

Proposal of another sort of factory schools is offered by Paul Verghese in the January-March issue of *New Frontiers in Education*, published in Delhi. After discussing the impact of Western methods of education on India's struggle for development, this writer says:

There can be little doubt that we have to show much more determination and discipline in *making institutional education directly linked to the primary relations of production and distribution*. Here there is no controversy. The industrialist-capitalist, the Gandhian, and the Marxist can agree on this—one of the few points on which they agree. Only the will for implementation is lacking. This is another point at which there is scope for the planning of colleges. The question is not that students should leave their institutions in an occasional sortie to a neighboring village. What is demanded is that the village's or factory's primary relations of production and distribution become the milieu in which education

takes place. The village or the factory itself becomes the school rather than an isolated school building. The students live in and participate fully in the agricultural and industrial activities of the society and get their training there. This is the point at which Ivan Illich's demand for "de-schooling" begins to make sense.

In another article in *New Frontiers in Education*, Jayaprakash Narayan says:

There is a mountain of critical literature in this country on education as it is and ought to be. Every aspect of education has been analysed and proposals for reform set forth by numerous committees, commissions and individual writers. But there is mighty little action. As a result the stage is rapidly being reached where "education" and the "educated" might combine to destroy this country.

Something "radical" is needed—but what? For an example Mr. Narayan tells about Samanway Vidyapith, a school founded a few years ago by a Sarvodaya worker, Dwarko Sundrani. This school was described at some length by Mr. Sundrani in *MANAS* for Jan. 6, 1971. He explained that the Sarvodaya movement works to strengthen the weakest, least developed section of Indian society—the village peasants, who constitute 82 per cent of the Indian population. Finding that the major obstacles to reconstruction are in old habits, customs, and tradition, he decided that a school was the best way to begin reform. He followed the counsel of Gandhi in two ways: first, the crafts of village life were made the basis of education; second, the school was wholly independent of government control or support. The school raises crops of soybean and peanuts and has milk from a cattle herd of superior breed. Model farming practices are being developed and used educationally with nearby villagers. Wasteland is being recovered through organic methods and improved irrigation. Sale of agricultural and dairy produce helps to support the school, and after their first five years of schooling the children begin to earn as well as learn.

The children come from the villages:

We want to train the boys in agriculture, dairy work, and food processing, and the girls as nurses, and then train them all as organizers. They will earn their livelihood on their farms and organize development work for the village.

Commenting on the achievements at Vidyapith, Jayaprakash Narayan says:

Because education here is not for a prescribed examination its teachers and workers are free from the control of the State and the deadening grip of its bureaucracy. Such freedom is the ideal of all radical educationists throughout the world. The students themselves of the Vidyapith, as soon as they are past childhood, have sufficient latitude for regulating their life on the campus and for participating in the planning and execution of their education.

Already Vidyapith has several achievements to its credit. Since it takes children from the lower castes, the schooling has shown that these children are in no way inferior in intelligence to the upper caste children. It is also evident that these boys and girls are mentally more mature than children attending the conventional schools. Vidyapith has had some success in taking as students unemployed dropouts from other schools, helping them to become productive workers and village leaders. The school is not yet self-supporting, and is kept going by a number of Indian and foreign foster-parents who "adopt" the children and supply 60 rupees per child per month for the eight years of their school attendance.

Plans for other schools along the lines of Vidyapith are under way. "Dwarkobhai's pioneering work," Jayaprakash Narayan says, "has set in motion forces of educational change which might in time produce the great revolution in education that this country so desperately needs." Mr. Sundrani says of the school:

Our method is not competitive. We wish only to give them a sound academic education and to teach good farming techniques to the boys and nursing to the girls. It is our hope that when they are adults they will return to the villages from which they came and act as a wedge between their people and the poverty of the past.

*What Kids Can Do*—a publication issued by the National Commission on Resources for Youth—makes an interesting contrast with the report from India. This illustrated volume presents "40 Projects by Groups of Kids"—teenagers, for the most part—conceived and carried out by the young people. Here the reconstruction is aimed at specific social

problems. One project involved the use of puppets in connection with demonstrations to fight drugs, VD, and Alcoholism, and one related to prevention of lead poisoning. A group of youngsters started a center to provide counsel and refuge for runaways, and another group worked out a program of aid and advice for teenage defendants in court. There were plans to show tenants how to fight negligent landlords and on one project the students made a film depicting the deterioration of a city as the means of stirring officials to action. This took place within the framework of the public schools.

Not all the projects, however, represented the struggle against urban decay. In one case a home economics class established a restaurant in the schoolroom, and another group developed a natural science museum. Missing, however, is education for another sort of life, in both outlook and basic activity—something admittedly difficult in the existing urban environment.

One project originated with some parents in Dade County, Florida. They wanted a playground and recreation area for children. After soliciting ideas from architects and designers, they enlisted the help of local teenagers and got the playground ready in about ten days. First they enclosed the area (60' x 70'), using telegraph pole cross-arms for fencing material. They secured some large sewer pipe left over from a construction project:

The pipes were transported to the playground in a truck volunteered by a local construction company. They were joined together to form tunnels. The pipes were covered by fill and sand so they became little hills. The children had endless adventures in this particular structure. The sand and fill were also donated locally, and some donated fiberglass was used to coat the inner and outer surfaces of the pipes to protect the children from injury.

*What Kids Can Do* is filled with ideas that can be put to use by enterprising teachers. Most such ideas, of course, need adaptation. The value of the book is in its demonstration of possibilities and in a wide range of suggestions. The address of the National Commission on Resources for Youth is 36 West 44th Street, New York, N.Y. 10036.

## *FRONTIERS* Institutional Medicine

RostYN LINDHEIM, an architect and consultant in the planning and design of health facilities such as hospitals, clinics, and nursing homes, has written for Ivan Illich's Center for Intercultural Documentation (CIDOC) a paper which points to the built-in conflict between medical technology and human need. While the ostensible motive for erecting such structures as hospitals is the service of the sick, this purpose is soon forgotten in the adjustment of the plans to the requirements of medical technology. In her CIDOC paper, "Humanization of Medical Care," Mrs. Lindheim writes:

There is a fundamental contradiction between our ability to render personalized medical care to the individual and technological medicine as it is practiced in modern medical centers. We have been trapped into becoming slaves of medical technology rather than mastering the technology for our own benefit. Paradoxically, the achievements of modern technology have created their own Frankenstein. The very technology developed to prolong life can cause incredible suffering by keeping people "alive"—in name only—when there is no hope for their recovery. Many of the medical advances designed to cure illness themselves cause illness.

Mrs. Lindheim tells how this works in practice:

Highly developed medical technology requires standardization, professionalism, and economy of operation in order to be effective. From the technological point of view, the less participation on the patient's part, the better. Yet we know intuitively that a most important and little-understood ingredient for patient recovery is patient participation and will to get better. These contradictions are reflected in design requirements for medical facilities. The need for sterile environments, efficient utilization of highly trained professional personnel, and meticulous coordination of people and machines conflicts with the human need for reassurance, sympathy, comfort, and contact with people who really care. It is common for doctors and administrators to specify that the medical centers be centralized and efficient—and hopefully "homelike" as well. They assume that a humane environment can be achieved by painting

walls, carpeting floors, arranging chairs in groups instead of in rows. I take issue with the "cosmetic approach" to humanization. I don't want to minimize the value of superficial amenities, but it's like applying visual placebos to root out cancer.

Along with the standardization imposed on the patient is the psychological submissiveness induced in him, so that the definition of health services is "by those who control the production of those services rather than by those who consume them." There is great and widespread faith in scientific medicine and in the power of medical technology. A natural result, Mrs. Lindheim suggests, is that—

Parallel with this increase in the role of technological medicine is the increase in medical domination over many functions of society which were previously controlled by the church, the state, the family, and the individual. The natural processes of birth and death are treated as illnesses and located in the hospital setting under the control of the physician. In many cases, fitness to work is certified by medical examination; a psychiatric patient may be banished from society by a psychiatrist. Drug addiction and alcoholism are now labeled as medical diseases and treatment is also in the hands of the medical profession. Doctors have taken over the function of the religious clergy, such as the rites of passage, and many of its trappings—the white coats, the use of Latin to write prescriptions.

Fortunately, strong resistance to this trend is now developing. Increasingly, pregnant mothers are refusing to think of having a baby as some kind of illness, which it comes to be regarded in the hospital setting. Believers in natural childbirth are persuading independent parents to change their relations with doctors and to learn methods of birth which reject "the dependency-oriented practices of most obstetrical services." Fathers are insisting upon being present and participants in the labor and delivery process, and home deliveries, while still comparatively rare, are increasing.

There are similar protests against the typical medical attitude toward death. Mrs. Lindheim objects to the medically framed customs which isolate the living from death and dying:

In their book, *The Psychology of Death*, Robert Kastenbaum and Ruth Alsenberg describe how illness and death are removed from household management and how even when he is within hospital walls the patient is not supposed to die in just any place at any time. It is deemed important that the survivors (other patients, staff, visitors) not be exposed to the phenomena of death except under carefully specified circumstances. The staff is angry when death occurs in the wrong place. The isolation of death from the natural processes of life has a drastic effect on the way we design our hospitals. The morgue is always located so the body can be sneaked out without being seen by patients or visitors. There are isolation rooms—which are really dying rooms—to hide death from the rest of the patients, yet they generally know where the room is, and what it is for.

Concluding, Mrs. Lindheim proposes close and continued attention to the glaring contradictions she finds inherent in the modern medical system. They are:

The myths and beliefs in the power of medical technology vs. the real effects on health of this technology; the space priorities for machines vs. the space needs of people; the natural processes of life—birth and death—vs. their treatment as diseases, standardization of procedures vs. the need for individualism; and professional domination vs. personal initiative.

The question is: Why do these contradictions arise? Mrs. Lindheim feels that there must be more "research," but the explanation seems evident enough. At work is a basic misconception of the human being, of his welfare, and of his needs. Man is not, as Erich Fromm said years ago, a "thing." Yet medical theory treats man as a thing, an object, and medical practice has developed in ways consistent with this view. The revolt against both the practice and the attitude which produced it is now under way.