VOLUME XXXIII, NO. 38
SEPTEMBER 17, 1980

LEVELS OF DISCLOSURE

THERE is a contrast between two kinds of reading material that ought to be instructive, if we could figure out how to make it so. Drawing the contrast grows out of reflection on the sort of books, now so plentiful, which inform us of all the things that are going wrong, or that we are doing wrong. The accounts of these mistakes are so persuasive, so convincing, that they make you wonder how we managed to survive until now. We say this, not to minimize the importance of ecological, environmental, and socio-economic criticism, which is certainly needed, but to give shape to what seem basic questions.

The other sort of reading is concerned with the miracle of life, its endless adaptive power, its capacity to overcome obstacles, and the cunning of organic processes in turning to advantage what seem wholly adverse conditions. There are hundreds of books which celebrate the wonder of what we call, in our ignorance, "natural processes," and hundreds more which honor the subtle functions of the human body, from the metabolism going on in a single cell to that incredibly complex switchboard of neural impulses that we call the brain. It seems well to remember, as we read in the new books about the numerous abuses to which we subject our bodies, the endless resourcefulness with which the body copes or tries to cope with the crimes we commit against our organism, year after year.

Something similar might be said of the planet. Many years ago, a teacher of biological chemistry at Harvard, Lawrence J. Henderson, was mightily impressed by the extraordinary collaboration of supposedly indifferent natural forces in the support of life. In a now almost forgotten book, *The Fitnes.s of the Environment* (1913), he said m summary:

> There is, in truth, not one chance in countless millions that the many unique properties of carbon, hydrogen, and oxygen, and especially of their stable compounds, water and carbonic acid, which chiefly make up the atmosphere of a new planet, should simultaneously occur in the three elements otherwise than through the operation of law which somehow connects them together. There is no greater probability that these unique properties should be without due cause uniquely favorable to the organic mechanism. These are no mere accidents; and explanation is to seek. It must be admitted, however, that no explanation is at hand.
>
> There is but one immediate compensation for this complexity; a proof that somehow, beneath adaptations, peculiar and unsuspected relationships exist between the properties of matter and the phenomena of life; that the process of cosmic evolution is indissolubly linked with the fundamental characteristics of the organism; that logically, in some obscure manner, cosmic and biological evolution are one. In short, we appear to be led to the assumption that the genetic or evolutionary processes, both cosmic and biological, when considered in certain aspects, constitute a single orderly development that yields results not merely contingent, but resembling those which in human action we recognize as purposeful. For undeniably, two things which are related together in a complex manner by reciprocal fitness make up in a very real sense a unit,—something quite different from the two alone, or the sum of the two, or the relationship between the two. In human affairs such a unit arises only from the effective operation of purpose.

What purpose? Whose purpose? These questions are the trouble with agreeing with Lawrence Henderson. How much can we say, from the evidence at hand, about the *meaning* of this wonderful collaboration of natural forces in the support of life? There are of course dozens of inadequate answers. *Laissez faire* economics is one of them, in explication of the evolutionary ethic of the survival of the fittest. "Fittest for *what?"* comes the persistent question and then the argument proceeds, usually producing a great many shallow claims to knowing what life is for and how it is truly fulfilled. The only valid

conclusion from all this controversy is that we know far more about what is wrong than about what is right in what we are doing with our lives.

In consequence, increasing attention is now given to critics who argue from ecological premises, since what they say is not in behalf of some ideological doctrine, but simply an appeal on the side of life. The beginning of a chapter in John H. Storer's *The Web of Life* (1953) makes a good illustration:

> There is a spot in the woodlands of southeastern Tennessee that can never be forgotten by one who has seen it. To reach it, one may travel for a hundred miles through forest-covered hills, rich with laurel, azalea, and rhododendron, and along springs and brooks and ravines which sometimes open up into green meadows where cattle graze.
>
> Suddenly this green world disappears. The forest gives way to a hundred square miles of desert as dead as the Sahara. The rolling hills are cut into rows of low, steep-sided ridges, sterile and bare of any life. The soil is dry, the springs and brooks are gone. In this area the annual rainfall is less than the surrounding country. The winds are stronger. It is hotter in summer and colder in winter. Here and there on this desert there stand in rows the dead skeletons of small trees, planted by people who hoped to start a new forest.
>
> The soil in the nearby woodland is dark, rich, and sponge-like. That on the desert is coarse, hard, and yellow. This desert was once covered by a forest and by rich forest soil. But today that soil lies five miles down the valley at the bottom of a reservoir and the shoals of coarse desert soil grow deeper, year by year, as every rain washes its fresh quota down to the reservoir.

What had happened? Decades earlier, the fumes from a copper smelter had killed the surrounding trees. While such fumes are now controlled, the desert is a permanent one, all efforts to restore the forest having failed. Left to the slow processes of nature, this land may require hundreds of years to regain a forest cover. Bare as it is now, the water will continue to run off and wash away the remaining soil until nothing remains but solid rock, the dead-end of erosion. Only at this point can restoration begin:

> Eventually nature will find a solid footing, whether it be a ledge or a rock heavy enough to withstand the movement of the soil. Here seeds may find shelter for a foothold.
>
> Or life may even start on the face of the rock itself. The rock offers little in the way of food and moisture, but on its secure base the pioneer plants may gain a foothold. Such plants must have the ability to dry up and lie dormant through times of dry weather, then waken to absorb the moisture of every rain or heavy dew. Many species of lichen have this power. Their rootlike fibres secrete an acid which dissolves minerals from the rock. Eating their way into it, they prepare an entrance for moisture which may later freeze and crack off rock particles—the beginnings of soil. The lichen thus offers to other more delicate plants a seedbed with moisture, a foothold on the rock, and mineral solutions for food.

By this laborious means, the basis of a plant community is at last established, and some day there may be enough soil for trees to grow once again. Tiny root hairs will embrace each particle of dirt, "tying it into place, making a secure foundation for a further spread of new plants around the parent rock." Mr. Storer discloses the hidden drama of recovery:

> A root system is a really incredible thing. Many studies have been made of its extent. In one study, a plant of winter rye grass was grown for four months in a box with less than two cubic feet of earth. In that time the plant grew twenty inches high, with about 51 square feet of surface above the ground. But underground the root system had developed 378 miles of roots and an additional 6,000 miles of root hairs! This meant an average growth of three miles of roots and 50 miles of root hairs for each day of the four-month growing season. The growth rate varies with different plants, of course, but this gives us some idea of the activity that goes on under the surface of a quiet-looking meadow, while the grass prepares food that will later become milk and meat and butter for us.

What can we do with such wonderful anecdotes about Nature, besides recite them at Commencement time, and then forget them in the presence of really urgent business? Ecological pieties are all very well, and stories about people who, in order to survive, cherish thimblefuls of soil—brought, in one case, by African sirocco

winds from Libya and deposited as fertile dust in holes bored in the naked rock of Malta, where, according to Schliemann, after fourteen years, there is enough transported earth to receive seeds—excite the imagination for a moment or two, but what have such matters to do with us?

Well, erosion and pollution are no longer far-off events for the United States. But any serious effort to remedy what are, in the areas most affected, almost fatal degradations of the environment, meets with immediate opposition. Consider the case of Charles Thompson, TV newscaster. Invited by a Jacksonville, Florida, station to do some stories on local pollution, he found out that a large textile and pulp paper mill in a nearby town was pumping 40 million gallons of water out of the ground each day, and discharging 25 million gallons of industrial waste into a river and the Atlantic Ocean—*poisonous* waste. The daily shrimp catch, local fishermen said, had fallen from two thousand pounds to twenty, and conservationists declared that the mill's effluents were "destroying 10,000 acres of oyster beds," with the area's clam population already gone entirely. The TV reporter did his story, and then—

> Shortly after his report on the destruction of the oyster beds, Thompson began receiving long-distance phone calls from angry voices identifying themselves as Rayonier [the paper mill] employees. They promised to shoot, kill, drop in the river, and otherwise interfere with Thompson's person if he did not lay off that company.

He didn't have time to be a hero. He was fired. He was just supposed to do a little story on pollution, not upset the whole community, including employers as well as the employed. Commenting about the phone calls, Thompson said:

> They sounded damn serious. . . . When a guy has been working eighteen or nineteen years and the only job he knows is log presser for a pulp mill, and he thinks he's going to lose that job because of a story you've written, he gets scared. Even though he has to breathe that air, drink that water, and can't find any oysters, you can't rationalize with a man who thinks he's going to lose his job. You can't tell him he could have it all if the mill would just live up to the law." (*Nation*, Nov. 9, 1970.)

The threats implicit in any sort of change for the better come in a variety of styles. An example is given by Kirkpatrick Sale in an article (taken from his book, *Human Scale*) in *Next* for May/June:

> Let's say America wants to alleviate the crisis of domestic hunger, not simply for humanitarian reasons but because feeding 20 million underfed citizens turns them into better workers, better consumers, and better taxpayers, and prevents them from turning to social unrest. But given the nature of corporate agriculture, a decision to grow more food means a far greater use of energy for farm equipment, fertilizers, pesticides, and transportation to markets, thus adding to the energy crisis, driving up energy prices, and making the cost of growing and distributing food even more expensive—ultimately putting food out of the price range of the needy. It means increased use of pesticides, some of which in the air, soil, or food will cause additional disease and debilitation, especially among the poor, who would thus be put out of work and have less money to spend on food. It means increased use of chemical fertilizers, the mining of which adds radioactivity to the air and can cause further sickness; and the fertilizers will eventually leach even more into surrounding water systems, damaging the marine life, curtailing the supply of fish for food. It means the expansion of larger farms with greater capital, thus driving out the owners of small and marginal farms who will be forced into the cities to either join the ranks of the underfed or get on the welfare rolls, adding to government spending and thus to inflation, driving up food prices. With increased inflation and abundant agricultural supplies, farmers will be getting less money for their crops, so they will have to either get subsidies from the federal treasury (increasing inflation still further, particularly for the poor) or cut back on production (forcing prices up, thus making less food available for the underfed) .

Whichever way you look at it: double bind. He has another example:

> People living in cities, where natural forms of exercise have been pretty much eliminated, have taken to jogging and cycling to build up heart muscles and ward off coronary diseases. But when people jog and cycle in cities, they expose their lungs to about

> ten times as much air pollution as they would otherwise, and the activity itself leads to hyperventilation and the inhalation of even greater quantities of pollutants, many of which are known causes of heart disease. So if you do not exercise, you risk coronary illness in one way and, if you do, you risk it in another.
>
> Double bind.

Here Kirkpatrick Sale (who wrote the foreword to the 1978 edition of Leopold Kohr's *The Breakdown of Nations*) is making a case for smaller socio-economic and political units, by showing that whatever we do to solve our problems at the mass level, with measures imposed by vast, centralized authority, the remedies are not only inadequate but inevitably the source of new problems. This is an argument, not from ideological premises, but from analogy with natural processes. Small, regionally limited societies do not have these problems, except as victims of powerful nation-states.

How do you win an argument like that? Well, you don't—not really. Arguments from analogy, while intuitively strong, may be logically weak. People can always say, "Things are different now, or here," and telling them that the differences are only superficial, that the principle holds, means little when it is a matter of keeping one's job or getting the Iranians or the Arab nations to sell us all the oil we need. Yet arguments from analogy are really the best because they may lead to what are actually philosophical reflections, as anyone can see from reading Kohr and E. F. Schumacher. Apart from responding to short-term self-interest, people change their minds mainly from instinctive or intuitive moral inclinations—by some inward sense of what is right and good, by feelings of proportion and the promise of meaning—and then they look for the practical reasons that will show what they feel to be good will actually work. We *all* do this, no matter how elaborate the rationalist case we make in support of our opinions.

It is best, however, to do it consciously. Schumacher had unparalleled skill in this. He said in effect, "Look here, the practical symmetries and the moral symmetries match up—you can see it for yourself!" And he piled up the evidence. Being very bright, he displayed the evidence, the facts of his case, with considerable persuasive power. He made the moral factor in human life the controlling principle of his argument, but laid on the supposedly impersonal "facts" in a way that was very difficult for his opponents to dispose of. So they mostly ignored him. Yet he said things that vast numbers of people were inarticulately longing to hear—things such as "The universe has meaning," and "The logical, the natural, and the good are the same process and essential reality, looked at from different levels, with our different perceptive and cognitive powers." But you have to take the position of a responsible human, a being with duties and obligations, and with moral intentions, in order to recognize the actual union of the ethical and the practical facts of life.

This, to borrow from Thomas S. Kuhn, is the fundamental paradigmatic change affecting modern life. In place of the doctrine of "Rights," it reveals the obligation of Responsibilities—a theme underlying the thinking of all the major pioneers who have been preparing the mind of the time for this change. One need mention only a few names—Polanyi, Maslow, Mumford, and Berry, and before these Tolstoy and Gandhi—to confirm this view. A contemporary writer, Henryk Skolimowski, lucidly characterizes the transition in his recent book, *Eco-Philosophy* (London: Marion Boyars):

> In changing ourselves and our relationships with it, we are changing and co-creating the universe. Out of the lethargic trance of technological inertia, we are emerging with heightened awareness of our destiny, which is to build a responsible world by assuming our own responsibility, which is to infuse the world with meaning and compassion, which is to carry on the unfinished Promethean story: the story of man unfolding—of which great systems of past philosophy are such a luminous and inspiring example.

This brings us to consideration of a third kind of reading material—the literature of controversy concerned with the paradigm change. At the

beginning of this discussion we spoke of two kinds of writing—one kind concerned with the splendors (and the mysteries) of natural processes, within limits approaching perfection, and the other made up of accounts of the messes human beings have made of their lives, both collectively and individually. It follows from this comparison that there should be—and is—intense and continuous argument between those who say (in effect) that there are no "moral issues" when it comes to scientific truth or reality, and those who are convinced that moral questions have become paramount, even though they may soft-pedal this claim in demanding radical changes as the only remedy for the immense difficulties besetting the modern world.

A book of particular value in studying these moods and tendencies is *The Energy Controversy—Soft Path Questions and Answers* (Friends of the Earth, 1979), by Amory Lovins and his critics, edited by Hugh Nash. Lovins is a young nuclear physicist who has taken on the entire establishment of conventional physical science, and has proved bright and persuasive enough to shake it to its foundations. The quality of his moral assumptions is evident enough, but his practical knowledge enables him to carry on the debate on the grounds of conventional (positivist) science, and to extract agreement from (some of his) opponents—opponents who began by supposing that he was only one more fuzzy-minded "idealist." Lovins is an idealist, but one who shows that it is quite possible to have high ideals and be hardheaded in their defense.

In short, one could say that Amory Lovins is an advocate of an idea "whose time has come." He is on the side of the sweep of history—typified by the conviction that human life has moral meaning and may have some kind of transcendent fulfillment, and that science, logic, and social arrangements must eventually reflect and be based on such feelings, or bring ultimate disaster upon mankind. At the same time, Lovins is convinced—as are many others—that humans need to reach this view individually by independent thinking, by the use of science, logic, and common sense, and he therefore constructs and presents arguments appropriate to several levels of analysis and discourse. The nuts and bolts of the processes of intellectual and philosophical change are on display in *The Energy Controversy*.

REVIEW
THE ROLE OF HUMANS

AT the insistence of a reader, we got from the library—after a long wait—*The Culture of Narcissism* (Norton) by Christopher Lasch, and read in it some. We had avoided the book for two reasons. First, everybody was talking about it, so why should we spend our limited space on something that could not possibly escape attention? The other reason was that critics seemed to agree that Lasch had become a monotonous doomsayer and that his book provided no strands of hope. Well, the fact is that Lasch is a perceptive critic who has become thoroughly aware of the tapestry of self-defeat woven by present-day culture, and his rejection of all conventional programs for change is evidence of his intellectual integrity rather than despair. Lasch has read carefully the best of the modern cultural essayists and critics and has written a selective report on what seems to him a consensus of their most searching findings. In this sense *The Culture of Narcissism* is an encyclopedic work, and reliable for the reason that the author understands and does not alter the meanings of the writers he quotes. While reading the book we noticed that *Freedom* (the anarchist weekly review published in London) gave it careful and respectful attention. The *Freedom* (April 12) summary by John Walden is deft and seems on the whole just, so we quote from it:

> In *The Culture of Narcissism* Lasch quickly sets forth his assumption that bourgeois society no longer has the ability to deal with contemporary problems; that liberalism, which he views as the political theory of the bourgeoisie, is dead but has yet to be replaced, while the same fact holds true for bourgeois science and economics. Concurrently Lasch views the distrust of the ruling class by the middle and lower classes as signifying the possibility of a new capacity for self-government and the end of the dependence on experts and bureaucracy which he feels has replaced the earlier traditions of local action and mutual aid. Only through the return to these earlier values can a new society evolve from the wreckage of capitalism.
>
> The natural question for the reader to ask at this point is just how will this evolution come about. Unfortunately, as far as Lasch is concerned, the reader will have to wait until perhaps his next book. Lasch makes it clear that the purpose of *The Culture of Narcissism* is not to document the birth of a new society but to describe the end of the old one, a society where the "logic" of competitive individualism has reached the point of "all against all" and where the pursuit of happiness has ended in a culture of narcissists who are concerned only with "self" within a culture that reproduces its worst features as it collapses. . . .
>
> Lasch believes that most of what passes today for cultural radicalism in fact only supports what it means to criticize. Most radical theory is shown to be stuck within a simplistic, and worse, dated analysis of society which has been left behind by the evolution of capitalism. . . . Thus Lasch uses history to set up the target and criticism to shoot it down. The problem with this technique is that he fails to offer alternatives and instead produces only a critique of others.

Anarchist critics, whatever their shortcomings, have one outstanding virtue: they do not submit to the illusion that there is some collectivist political device by which social salvation can be won. They know that a good society will be the flower of emerging individual integrity and the development of comprehensive self-reliance. While they argue a lot about how to establish the social matrix in which this evolution is most likely to take place, and, being rather tough-minded, are sometimes quite harsh on each other (as is not uncommon among the spokesmen for small minorities), yet the first principle of their thinking, the priority of self-rule, is seldom compromised by contentions concerning where and how to begin. As critics, therefore, they remain valuable if not indispensable.

But why is it so difficult and hazardous to propose alternatives? Effective change has many requirements, but the first and most important is a free use of the imagination. Here the heavy hand of the scientific method is a major obstacle, although for understandable reasons. Social critics want to be taken seriously, so they look to the social and psychological sciences for

something resembling "empirical" support for their ideas. Since the scientific method is largely based on the assumptions of materialism, resort to the accumulations of scientific observation and theory for support of a new idea inevitably clips the wings of imaginative inspiration. As a result the idea either goes flat and pedestrian, or it seems (without such "evidence") sheer speculative enthusiasm. Progress, therefore, takes place only inch by inch.

Meanwhile, emergency after emergency is upon us. This, alas, seems a problem without immediate solution. So the question then becomes: What other support can we find for our visionary dreams? Is there a level of persuasion that might be effective, yet is commonly neglected in our time?

There may be such a level of persuasion, but if there is, some sort of "leap" to another, perhaps a "higher," stance is surely involved. Certain underlying assumptions of the present age will have to be critically examined and then abandoned, with replacements that throw another kind of light on the endless "facts" of our lives, so that the facts may be understood in another way. For this, a deliberately heroic beginning will be needed.

In *Science, Animals, and Evolution* (Greenwood Press, 1980, $18.95), Catherine Roberts, an American-born biologist who lives in Denmark, takes the leap and makes such a beginning by going back to Plato for an unambiguously spiritual conception of the nature of man. The meaning of life, she affirms, is *ethical,* and human beings cannot understand themselves unless they define their nature and destiny in terms of obligations, or what might be called Promethean labors in behalf of all living things.

Herself a scientist, this author commands attention by reason of her deliberate engagement with and criticism of the prevailing conception of scientific method. She assembles ample evidence to show that she is not alone in this open break with the "moral neutrality" of current scientific thinking, calling on such figures as Michael Polanyi to show the quality of the change she finds taking place. This forthright stress on ethics may be welcomed by many readers. Scientific intellectuals have for generations stressed the "æsthetic" aspect of scientific inquiry, in order, one may think, to leaven the harsh materialism of their objectivist discipline, but only with this work by Catherine Roberts has moral obligation been declared to be a defining characteristic of the nature of man.

Quite evidently, the ruthless cruelty to animals in scientific and medical research—commonly termed "vivisection"—was the initial inspiration for this work, as for her earlier volume, *The Scientific Conscience* (Braziller, 1967), although the development of her arguments is in marked contrast with the somewhat emotional, if not sentimental, appeals of many of the opponents of vivisection. While fully as outspoken in her rejection and condemnation of the mutilation of "defenseless sentient beings" in the name of the pursuit of knowledge, she also directly confronts the particular claims and arguments of biologists and medical researchers at each level of their contentions, obliging them to reconsider (if they will) the very foundations of their idea of scientific truth. A brief passage from the concluding chapter, "The Spiritualization of Biology," will illustrate the temper of Dr. Roberts' aims:

> A biology which now violently mistreats and wantonly destroys sentient lives in the delusion that scientific progress justifies all means will become a biology gently seeking out subhuman lives in the resolve to help them. The spiritualization of biology is more than putting an end to morally reprehensible practices. As biologists become more saintly, they will proceed beyond this to more positive thought and action. They will become concerned with the potentials of the whole of evolving life.
>
> What is the ultimate purpose in realizing individual human potentiality? It is surely not individual gain alone. The more real an individual becomes—the more areté he attains—the better will he understand that he is rising in order to help others

> to rise, and that all *must* rise for the sake of the cosmic Good.

The point to be made here is that a world pervaded by this conception of the meaning or purpose of human life would need no books exposing the Narcissistic self-indulgence and trivial preoccupations of a carefully cultivated egotism—such as now, as Christopher Lasch shows, has poisoned the atmosphere of family, community, and all cultural life. This is no wild utopian speculation. There have in the past been both individuals and groups who have accepted *noblisse oblige* as the first principle of truly human life, and have patterned both cultural and educational activities according to this idea.

What are the sources of this conception? Primarily, they include the spontaneous declarations of the human heart, when the mind has been freed from the bonds of animal self-interest and the hedonism of pleasure-seeking, but they are also found in the best of world literature. As Dr. Roberts says:

> As a platonist convinced that evolving human life on this planet is an approach to divine Good, and as a biologist convinced that our study of evolving life must continue, I believe that both religion and science will become increasingly spiritualized, and that a new relation will be established between them whereby they will renew and purify themselves in conscious orientation toward the divine ethic. . . .
>
> Plato knew that the problem is essentially religious and spiritual in the sense of being related to the divine Good and that it involves participation that leads to transformation. Believing that the soul, having existed prior to its earthly life, already has partial knowledge and experience of the higher objective reality of the spiritual realm, he saw that man's acquisition of truth becomes, in part, a recollection by the mind of truth already existing in the soul. . . . Conscious preoccupation with the problem of good and evil and ethical choice can create good in the world, and the whole of evolving life can thus become more rapidly real.

It is worthy of note that Arthur M. Young contributes a foreword to Catherine Roberts' volume. Today the convergence or union of the strongest expressions of intellectual inquiry with moral vision is increasingly evident.

COMMENTARY
THE GREEKS HAD A WORD FOR IT

IN the quotation from the book by Catherine Roberts in this week's Review a term is used—*areté*—which needs explanation. It has definition in Dr. Roberts' earlier work, *The Scientific Conscience*, where she says that the Greeks "recognized that the *areté* or supreme excellence of any living organism is concerned not only with fitness but also with purpose and the realization of its potential—and thereby they knew it was an ultimate good." She continues:

> The Greek concept of *areté*, which seems to form such a natural basis for any poetry attempting to express wholeness both in the poet and in his living material, bears little relation to modern science. It partakes too directly of the spiritual world for that. It is a reflection of man's awareness of the good . . . for a man to live and propagate as a healthy vigorous animal in blissful harmony with his environment represents only a fraction of human *areté.* The supreme excellence of which he is capable stretches further heavenward than that. Unique among all organisms in his awareness of the realm of the spirit, he strives to approach it, and only in the striving can he realize his potentialities and become as human as he is able.

In her current book, Dr. Roberts wonders if some of the higher animals participate in spiritual activity, concluding that, at any rate, *Nature thinks no evil—and does no evil.* "How blessed is man," she exclaims, "to have an environment of purity!" Some day, one must hope, our language and literature will once again give currency to terms of such rich implication as *areté*, and humans will have an environment of high inspiration as well.

Clay Olson's idea, expressed in *Fruition* (see Frontiers), would then be the common practice of all human cultures, no longer only the dream of a few devoted individuals. But meanwhile, those few individuals are setting an example that may prove immeasurably restorative of the *areté* of community. How could anyone, coming into contact with a tree-planting enterprise undertaken to reduce the hunger in the world, ever forget the experience?

How can we alter the indifferent or destructive opinions of humans? it is often asked. Well, we can't. They must do it themselves. But what we can do is make some portion of the environment more *hospitable* to the changes we long for. This, at least, is wholly within our power.

CHILDREN
. . . and Ourselves

SOMETHING IS MISSING

A READER in Iowa has supplied us with a quotation from *Love* by Leo F. Buscaglia, which he believes will be of general interest:

> The true function of a child's education should be the process of helping him to discover his uniqueness, aiding him toward its development, and teaching him how to share it with others. . . . But society has the idea that what has been for centuries, even if it is not proven true, is the best way. This fallacy, if adhered to, leads individuality to its doom.
>
> Each child offers a new hope for the world. But this thought apparently frightens most people. What would society be like made up of all "individuals"? Would it not be unruly and lead to anarchy? We feel more comfortable with a "silent majority." We distrust and suspect "oddballs." The family must make the child "fit" into the societal scheme of things. Education is afforded a similar role.

Poor society! Was there ever a handier whipping boy? Except for very small communities, "society" is a loosely imperfect synthesis of opposing interests, an arena of conflicting opinions and practices presided over by a large collection of customs and laws to which people more or less conform because it is convenient and seems energy-saving to do so. Complaints about "society" are almost useless because, in fact, there is no one to hear, no one to act, although there are a few public-spirited individuals who try to improve the poor institutions and replace the bad ones—with indifferent success. Society seems made of the most laggard aspects of human beings, considered collectively, because people are mainly interested in their own affairs and prospects and give only a small part of themselves to common or social concerns. So social institutions stereotype human weakness and indifference rather than the inventive and freely choosing capacities of people. It follows that the inventive and unique cannot be socially generalized and therefore suffers suppression in a highly organized society. Or as people say, we need tight organization to increase production and win wars. It should be evident that individual decision must become paramount before we can alter such confinements of the human spirit. Organized effort can't ever do it, although it promises to, again and again.

Some terms exist to identify the qualities of freedom in human behavior. In his scale of moral development, Lawrence Kohlberg speaks of the highest level as "postconventional," by which he means wholly self-reliant, with conduct and decision based on self-reference to one's own highest ideals. Kenneth Keniston speaks of the few who become aware of the endless relativities of human opinion, yet are able to find a foundation for commitment in themselves. Musing on such possibilities, Dr. Keniston warned against the casual glorification of youth in the *American Scholar* for the fall of 1970:

> Admirers and romanticizers of youth tend to identify youth with virtue, morality and mental health. But to do so is to overlook the special youthful possibilities for viciousness, immorality and psychopathology. Every time of human life, each level of development, has its characteristic vices and weaknesses, and youth is no exception. Youth is a stage, for example, when the potentials for zealotry and fanaticism, for reckless action in the name of the highest principles, for self-absorption, and for special arrogance are all at a peak.

It is common practice to blame such evil tendencies on "society," while the fine qualities that emerge in individuals are attributed to their creativity and uniqueness. No doubt there is a measure of truth in such judgments, but some of our greatest heroes matured in very discouraging environments. We just don't know all there is to know about these things, although we are sure that ugliness and selfishness and cruelty are bad for both children and adults.

Keniston's further speculations are worth repeating:

> What, then, would it mean if our particular era were producing millions of postconventional, nondualistic, postrelativistic youth? What would

happen if millions of young men and women developed to the point that they "made up their own minds" about most value, ideological, social and philosophical questions, often rejecting the conventional and traditional answers? Would they not threaten the stability of their societies?

Today it seems clear that most youths are considered nuisances or worse by the established order, to which they have not finally pledged their allegiance. Indeed, many of the major stresses in contemporary American society spring from or are aggravated by those in this stage of life. One aspect of the deep polarization in our society may be characterized psychologically as a struggle between conventionals and postconventionals, between those who have not had a youth and those who have. The answer of the majority of the public seems clear: we already have too many "youths" in our society; youth as a developmental stage should be stamped out.

A more moderate answer to the questions I am raising is also possible. We might recognize the importance of having a *few* postconventional individuals (an occasional Socrates, Christ, Luther or Gandhi to provide society with new ideas and moral inspiration), but nonetheless establish a firm top limit on the proportion of postconventional, youth-scarred adults our society could tolerate. If social stability requires human inertia—that is, unreflective acceptance of most social, cultural and political norms—perhaps we should discourage "youth as a stage of life" in any but a select minority.

A third response, toward which I incline, seems to me more radical. To the argument from social stability and cultural continuity, one might reply by pointing to the enormous *in*stabilities and gross cultural discontinuities that characterize the modern world. Older forms of stability and continuity have *already* been lost in the postindustrial era. Today, it is simply impossible to return to a bygone age when massive inertia guaranteed social stability (if there really was such an age). The cake of custom crumbled long ago. The only hope is to live without it.

What, one might ask, is "custom," which Dr. Keniston declares we must learn to do without? Custom, you could say, is made up of cultural reflexes which develop as a result of people pursuing their ends in company with others. When the ends no longer seem desirable, the basis of custom begins to dissolve, and that is what Keniston is pointing out. The loss is disturbing because people no longer do what is expected of them. The familiar canons of good manners and taste tend to be replaced by careless barbarisms. Crudities in human relations are flaunted, vulgarity is celebrated as a sign of the equalitarian spirit, and talk of the pursuit of excellence is called "elitism." But something else—something good—happens at the same time.

The need for the essential kindnesses and courtesies in human relations is eventually rediscovered, and another "style" of manners develops little by little. By this means custom becomes less artificial, more directly connected with the spontaneous decencies of human beings. It is no longer possible to say of someone, that he has perfect manners but is coldly egotistical. In the same way, what we speak of as "morals" is redefined.

In society at large, such changes may prove extremely painful. Parents no longer understand their children and are led to distrust them. It is one thing to free yourself of meaningless custom at an early age, and quite another to be torn from its familiar protections by one's outrageous offspring.

Such changes are probably best accomplished within families of people who understand what is going on—families who use the reflexes of custom, but are not used by them. This means people who are able to transmit the authentic values of the past by adopting some of the less formal usages that are coming into being. They avoid both past and future cliches in order to deal with meanings in their relations with the young. This is *teaching* in its parent, fundamental sense—teaching by doing, which alone makes possible the same sort of learning. It is not an authority relationship, yet experience has and will always have a natural hierarchical role.

FRONTIERS

Things to Do

A MAJOR problem in conducting a weekly department titled "Frontiers" is to keep good ideas from becoming boring—or, as we say, too much of a good thing. Panegyrics on the excellences of an alternative life pour from the presses—little ones and big ones—reaching almost snow-storm dimensions, and reporting them with enthusiasm every seven days threatens to become an imposition on the reader. In fact, a good deal of "cause" publishing has an aspect which seems an imposition on the reader, who has a life of his own to live.

A reasoned editorial apology might say that we live in a society that is pulled out of shape in countless ways, and that any effort to improve its condition is bound to participate in *some* distortions. Nothing can be done about this except to admit and deplore it from time to time.

We do what we can to recognize new meanings of "Frontiers," but gravitate naturally to matters and questions relating to life on the land, since that is where the inspiration and practical application of the time is plainly to be found, although the analogues of this natural and essential activity are probably more numerous than most other enterprises, familiar or novel, suggest. Moreover, agriculture is almost certainly the region of initial rebirth for American culture, as Wendell Berry has persuasively made clear.

We have never told here about the group called Ecology Action, located at 25 E1 Camino Real, Palo Alto, Calif. 94306. The people there publish a monthly paper called *Ecology Action.* The May issue begins with a compact account of their work:

> In 1972 Ecology Action began a research and development pilot study on land provided by Syntex Corporation in the Stanford Industrial Park to test the yields, resource consumption, and sustainability of small-scale big-intensive food-raising. The techniques used are a simplified form of the biodynamic/French intensive method, which has its roots in Chinese agriculture dating back over 4,000 years and Greek agriculture 2,000 years ago.
>
> Preliminary findings show that this method can increase vegetable yields 400% compared with present mechanized agricultural techniques used in the United States. The yield is 200-3100%. Soybeans have yielded up to 2.25 times and wheat up to 5 times the national average under adverse soil conditions. As the soil improves, these yields are expected to increase. Per pound of food produced, this approach consumes 1/3 to 1/31 the water, 1/2 to no purchased organic nitrogen fertilizer (sometimes only locally grown compost is used), and 1/100 or less the human and mechanical energy when the soil system is in balance.

The land originally made available to Ecology Action was no Hunza husbandman's Shangri-La:

> Research so far has been carried out on a hard clay subsoil containing 36.4% rock (good agricultural soil contains 5%) and almost no available nutrients. The texture is still below average. As a result, root crop yields are still low; carrot yields are only about 2.5 times the nation-average, but should increase dramatically as the soil improves.
>
> Detailed information on yields and mini-farm potential is contained in Ecology Action's research reports. For example, 1972 tests indicated a vegetable mini-farmer using the method could probably earn $6,000 a year working a 40-hour week on one fifth of an acre. Later experiments have improved this projection to $10,000 to $20,000 a year for a 40-hour week on one eighth of an acre—including path space—with a capital investment of 1/60 or less compared with mechanical agriculture. $5,000 to $10,000 might also be earned growing 7½ to 30 completely balanced vegetarian diets on half an acre. The range depends on the length of the growing season and the diet used. Meat diets require two to four times more area, depending on the diet grown. All projections are based on big-intensive yields already experienced in Palo Alto or yields already experienced somewhere in the world on a large scale by commercial agricultural techniques. . . .
>
> A backyard gardener in the United States could grow a year's supply of vegetables and soft fruits (146 kgs. or 322 pounds) on as little as 9.3 square metres (100 square feet) in a six-month growing season. The food would be worth more than $160 and could eventually be grown in about 10 minutes a day, making the gardener's time worth over $5.00 per hour.

This newsletter, no doubt, is not for everybody, but even people without backyards and no hunger to get their hands in the soil may find it interesting. The articles are down-to-earth, unpretentious, and vastly encouraging. The fundamental text issued by *Ecology Action,* a well designed and clearly expressed manual, is *How To Grow More Vegetables* ($5.95) by John Jeavons, who has been with Ecology Action from the beginning and who studied with the late Alan Chadwick, the English gardener who was the group's major inspiration and teacher and practical guide. The book is profusely illustrated and filled with practical advice and instruction, systematically presented, step by step, for the beginning gardener. It is probably the best book available on biodynamic/French intensive gardening. (Superlatives are risky, but this one certainly looks like the best!) It is quite handsome, too, with the basic appeal of an anybody-can-do-it-almost-anywhere activity.

We also have for attention the first issue of a little paper called *Fruition,* edited by Clay Olson, which comes to us from Box 872, Santa Cruz, Calif. 95061. Its appeal is likewise to a great many, if not everyone, as the opening editorial makes clear:

> The Plan is a working idea for additional world peace by encouraging and planting public-access food foliage in the world, particularly fruit and nut trees and bushes which can cycle to fruition without cultivation other than the initial settling-in period. . .
>
> What are the benefits of planting fruit and nut trees and bushes on public access and private lands?
>
> Raw, fresh, organically grown fruits and nuts are available locally at minimal cost. Self-reliant communities mean more stable economies. With more food, through both local production and better (equal) distribution, there is less hunger In the world. Peace in the world becomes a realistic possibility when every one of us is fed. Happiness grows out of a healthy life in tune with nature's seasonal rhythms. Welfare will become a local community concern of each one for all others, rather than a hoax perpetrated by a rich man's government upon the poor.

There are pages on how and what to do, with objections met and questions answered. Even if only a few people start planting food trees, the point of doing it is bound to be seen by others, and so on. A lot of good, and *no harm,* can come from following this plan. This sort of project was the final thing that E. F. Schumacher wanted to accomplish, for England, a little before he died. Its merits are obvious.