NOT A DUMB QUESTION

THE argument about why people do what they do—whether they are impelled by an inward wisdom (or folly) or act solely in response to external stimuli, only imagining themselves to be free—has been going on for thousands of years. Today it has the form of a debate between those who may be loosely classed as Humanists—people who believe that the power to choose, to make relatively independent decisions, is the essence of human life—and the mechanistic biologists and behavioral scientists.

Since the issue has seldom been put more clearly than in Plato's *Phaedo*, the Dialogue which tells of Socrates' last hours and death, we quote the passage entire. It begins with the disappointment felt by the old Athenian with a book by Anaxagoras, which at first seemed to declare "that it is mind that produces order and is the cause of everything." Socrates eagerly continued reading:

It was a wonderful hope, my friend, but it was quickly dashed. As I read on I discovered that the fellow made no use of mind and assigned to it no causality for the order of the world, but adduced causes like air and æther and water and many other absurdities. It seemed to me that he was just about as inconsistent as if someone were to say, The cause of everything that Socrates does is mind-and then, in trying to account for my several actions, said first that the reason why I am lying here now is that my body is composed of bones and sinews, and that the bones are rigid and separated at the joints, but the sinews are capable of contraction and relaxation, and form an envelope for the bones with the help of the flesh and skin, the latter holding all together, and since the bones move freely in their joints the sinews by relaxing and contracting enable me somehow to bend my limbs, and that is the cause of sitting here in a bent position. Or again, if he tried to account in the same way for my conversing with you, adducing causes such as sound and air and hearing and a thousand others, and never troubled to mention the real reasons, which are that since Athens has thought

it better to condemn me, therefore I for my part have thought it better to sit here, and more right to stay and submit to whatever penalty she orders.

This seems a fair statement of the two positions. Socrates goes on, finding the argument against mind as the cause of human behavior quite ridiculous:

Because, by dog, I fancy these sinews and bones would have been in the neighborhood of Megara or Boeotia long ago—impelled by a conviction of what is best!—if I did not think it was more right and honorable to submit to whatever penalty my country orders rather than take to my heels and run away. But to say that it is because of them that I do what I am doing, and not through choice of what is best—although my actions are controlled by mind—would be a very lax and inaccurate form of expression. Fancy being unable to distinguish between the cause of a thing and the condition without which it could not be a cause! It is this latter, as it seems to me, that most people, groping in the dark, call a cause attaching to it a name to which it has no right.

Socrates, we might say, here makes a persuasive argument for hierarchical structure in humans, indicating at least three levels of action, each of which needs independent consideration. The body, he suggests, giving it only a little attention, has its mechanisms which enable us to move around. Next he postulates what seems a mere bodily sort of motivation—in this case fear of death and desire for survival—which, he contends, if it ruled, would long since have made him depart for the safer territory of Megara or some other haven. But what actually determined what he did-which was to remain in Athens and suffer death at the hands of his fellow citizens was his independent judgment of what was right to do.

Socrates is defending the common-sense position. It is given in experience that we *feel* ourselves to be free, although beset by many obstacles. The obstacles and the constraints

which frame a great many of our decisions support no argument against freedom for the reason that any freedom that we can think about and understand *requires* a framework of circumstances which obliges us to cope. Coping is either adapting or transcending, making necessary almost continual choice. Our decisions are examples of the kind of freedom we possess.

Why should anyone have trouble with this account of human life? Why have learned and apparently intelligent men strongly contended that the feeling of freedom people have is *entirely* illusory? (That it is often partly illusory goes without saying.)

If we could get Socrates to testify, he might say something like this:

"The trouble, it seems to me, arises from our native eagerness to find causes—and since the soul or mind is invisible, imperceptible to the senses, and since so much of our lives is involved in dealing with the world as presented by the senses, thinking about causes neglects invisible things. Most people, therefore, conclude that the circumstances under which we live are indeed the cause of what we do, instead of being only the conditions without which there could be no causation."

As a general statement. this serviceable. While millions of words have been written on the question during the twenty-three hundred years since Plato's time, not much of importance has been added. If anything, the problem has been narrowed to an issue in biology, since, for scientists at least, the connection between human intelligence and organic processes seems much too difficult to attempt to trace. The object has rather been to settle whether or not life is intelligent, and then, perhaps, to go on to the question of the part played by mind in vital processes, and if it can be thought of as independent of them.

The position assigned by Socrates to Anaxagoras is now held by those whom we call

Materialists. They maintain, as one of their spokesmen put it half a century ago: "The one thing that would be fatal to Materialism would be the necessity for assuming a controlling and directing intelligence at any part of the cosmic process." This writer, Chapman Cohen, adds (in *Materialism Re-Stated*, 1997) an explanatory justification:

Science has been able to develop only so far as it has set on one side this primitive anthropomorphic conception and worked as though Materialism were an accepted fact. To put the matter in another way: the essential issue is whether it is possible, or is ever likely to be possible, to account for the whole range of natural phenomena in terms of the composition of forces. That is the principle for which materialism has always stood. By that principle it stands or falls.

Does it stand today, or has it fallen?

Michael Polanyi, a persuasive reformer of the scientific theory of knowledge, thinks it has fallen, but a great many others—among them Jacques Monod and B. F. Skinner—believe it stands as durably as ever. One begins to wonder whether such questions are "scientific" at all. Conceivably, they are rather matters of moral or philosophical inclination. Summarizing his defense of the presence of hierarchical intelligence in both nature and man, Polanyi wrote ("Life's Irreducible Structure," *Science*, June 21, 1968)

The claims made, following the discovery of DNA, to the effect that all study of life could be reduced to molecular biology, have shown once more that the Laplacean idea of universal knowledge is still the theoretical ideal of the natural sciences; current opposition to these declarations has often seemed to confirm this ideal, by defending the study of the whole organism as only a temporary approach. But now the analysis of the hierarchy of living things shows that to reduce this hierarchy to ultimate particles is to wipe out our very sight of it. Such analysis proves this ideal to be both false and destructive. . . .

Mechanisms whether man-made or morphological, are boundary conditions harnessing the laws of inanimate nature, being themselves irreducible to those laws. The pattern of organic bases in DNA which functions as a genetic code is a boundary condition irreducible to physics and chemistry. Further controlling principles of life may be represented as a hierarchy of boundary conditions extending, in the case of man, to consciousness and responsibility.

A few months later, a historian of science, questioning Polanyi's argument, casually remarked at the conclusion of his letter (*Science*, Oct. 25, 1968)

Thus, while it may be of some interest to think of the universe as a hierarchy of systems, each providing boundary conditions for "lower" systems, it has not been shown that any but physical-chemical laws are needed throughout the hierarchy. It has not even been shown that the Janze laws may not be operative throughout. . . .

Why, one must wonder, this brass-bound determination to allow nothing but "physicalchemical laws" to have play in the universe? What is so threatening about the kind of intelligence we manifest every day of our lives? Must the excellences we most admire be reduced to chemistry in order to be scientifically respectable? Science itself is an exceptionally impressive manifestation intelligence—something of wonderfully non-physical, a comprehending power which uses the physical and reveals itself in the control it exercises over physical things. Why should so many scientists feel driven to insist that great thought is only the epi-phenomenon of physical-chemical law? What is so objectionable about higher laws to account for intelligent behavior?

There are of course a few scientists who have liberated themselves from this tendency—Michael Polanyi was one, L. L. Whyte another. Arthur Koestler gathered some of the most distinguished among them for a conference in Austria in 1968, the fruit of which was published in 1970 in the volume, *Beyond Reductionism* (Macmillan: Koestler and J. R. Smythies, editors). Another book of value is *Hierarchical Structures* (Elsevier, 1969), edited by L. L. Whyte and Albert and Donna Wilson, presenting the papers of twenty-three scientists and scientific thinkers, all

concerned with the presence and role of hierarchy in nature. For historical evidence of how hotly contested the idea of intelligence (or design) in nature has been throughout this century, one might turn to the books of William McDougall, for many years a psychologist at Harvard, and toward the end of his life the founder of the parapsychological laboratory at Duke University. His major classic, Body and Mind (Methuen, 191), is a comprehensive survey of the body-mind problem (the one Socrates defined) and a rigorous defense of mind as independent intelligence. Then, in 1928, he published Modern Materialism and Emergent Evolution (Methuen), a critical analysis of the attempt by the emergent evolutionists to account for human intelligence as an elaborately accidental product of material complexity. What was probably his last book, The Riddle of Life (Methuen), appeared in 1938, an attack on mechanistic theory and a defense of the idea that there are various levels of intelligent purpose evident throughout nature.

In a lecture given at the University of Washington in 1971, Jacquetta Hawkes, the anthropologist wife of J. B. Priestley, described how mechanistic thinking came to dominate virtually all scientific conclusions:

What was really a method, one way of turning our brains upon limited aspects of the universe that has produced them, has tended to become a view of life, a totalitarian ideology. It has been held that nothing that cannot be measured and proved experimentally has any validity. Extreme, and I think we can say, extremely naive, forms of behaviorism and positivism have captured able minds. Philosophy has been castrated, metaphysics made a dirty word.

Looked at in terms of *being*, reductionist thought suggests that the whole is no more than the sum of its parts and so leads to an old-fashioned mechanistic view. Applied to man this kind of thinking can still produce painful crudities. For example, that man "is nothing but a complex biochemical mechanism powered by a combustion system which energizes computers with prodigious storage facilities for retaining encoded information." Looked at in terms of *becoming*—that is within the dimension of time, reductionism suggests that the

evolved form is explained by its origins, the fruit by its roots. This reduction to origins can be stopped at any point that pleases the reducer. A vast reading public was apparently delighted to be reduced to Desmond Morris's *Naked Ape*. Or, if we prefer it, we can go back to the assumption, to paraphrase, that there is nothing in man which was not first in the amoeba.

What will explain this faithful allegiance to the lowest common denominator of action to explain everything that happens and is?

The answer may be twofold. First, there is evident fascination with the wonderful results of reading the Book of Nature in terms of mechanical cause and effect. The sense of having knowledge about the way things work was overwhelming to Galileo and to countless observers and experimentalists since. They said: If you can't isolate and measure the cause, you'll never have any certainty about the effect, which has also to be isolated and measured. Then you can relate the two. Indeed, showing how effect follows from cause is always a delight to the mind. Why? Because the mind is a reality which takes pleasure and finds satisfaction in independent work and achievement. A triumph of reason is a victory and self-fulfillment for mind-beings.

But the triumph became a trap or a prison. As Jacquetta Hawkes says, we turned what seemed certain knowledge about cause and effect throughout a single aspect of the universe into a total view of experience. Causes we can't see, measure, or objectivize, it was maintained, are not open to scientific investigation; probably, they don't even exist. Multiplying evidences that they do exist were very largely ignored because even the thought of such causes seemed to threaten the future of all science. We haven't, the scientists said to each other, any method of dealing with such causes—no rules on how they work—and no control over thinking about their consequences. As a scientific writer put it back in 1938, objecting to the findings of J. B. Rhine's experiments in telepathy:

ESP is so contrary to the general scientific world picture that to accept the former would compel abandonment of the latter. I am unwilling to give up the body of scientific knowledge so painfully acquired in the Western world during the last 300 years, on the basis of a few anecdotes and a few badly reported experiments.

It is easy to point out what is wrong with this comment, but equally easy to avoid doing justice to the feelings, hopes, and deep convictions which seemed to require it. At stake, for the scientists, is their determination to live in a knowable, manageable world. Surely, there is nothing wrong, in principle, with this determination. The problem is rather the expansion of the *ranges* of the knowledge, the crucial question being: Can this be done without loss of scientific integrity and competence?

To be faced is the proposition: "The conditions of the world in which significant causes operate are not only physical; they are also metaphysical—psychological, and ethical or moral!" This is a very large order for highly trained specialists whose experience and success have been limited to atoms and physical-chemical and biochemical laws.

Meanwhile, the evidence for relatively independent levels of intelligence which govern all natural processes continues to accumulate. In 1936 the biologist, Edmund Sinnott, observed: "When a plant develops a seed or when the embryo of an animal takes shape, there are forces at work of which we as yet know nothing." And long ago the biochemist, Albert P. Mathews, declared (in *General Cytology*, 1924, edited by E. V. Cowdry) concerning studies of the living cell:

We must leave out, because of our ignorance, the psychic side of chemical reactions. Our equations, therefore, will be as incomplete as if energy were omitted. The transformation of matter and energy alone can be considered in this chapter, which becomes hence like Hamlet with Hamlet left out. Let us not blind ourselves to this fact.

Actually, a great tide of support for this view of the organization and order of nature is now exerting influence. The books we have cited collect the thinking of some of the scientists who have generated this tide, giving the evidence confirming their convictions. A recent volume in summary of the trend to hierarchical thinking in science, excellent for its completeness and philosophic synthesis, is Krishna Chaitanya's *The Biology of Freedom* (Somaiya Publications, Bombay, 1975).

But, again, why is there so much *resistance* to a view of nature, life, the universe, and man which allows dignity and promise to all—a view openly based upon multileveled observation of the facts of experience?

A distinguished essayist of our time put this question to a group of graduate students, including some practicing biologists, getting no answer that seemed to make sense. "Was it," he later asked himself, "a dumb question?" All that human beings accomplish in the way of synthesis and creation is done with a confident feeling of freedom, exercising original powers of thinking, and why should science, a magnificent expression of the will to know, shut all this positive capacity and potentiality out from the account of the world as we know it?

This cannot be a "dumb question"!

It is as though the power of reason had in some sense devoted the past three hundred years to systematic justification of the cult of unreason! Will the explanation given by August Pauly, a distinguished biologist of the turn of the century, satisfy our minds? He said:

The prospect that our attempts at explanation in biology may lead us in the end into psychology is distasteful to the natural science of our time. Psychology, with its phenomena grasped by the understanding rather than the senses and with its suspicious affinities with philosophy, appears as a sort of mysticism; and natural science, which trusts only to the senses and mistrusts reason and philosophy, must not come to that. That would be to end in darkness.

Α more illuminating approach understanding this stubborn rejection of psychology and philosophy may be suggested in Marshall Sahlin's new book, Culture and Practical Reason (University of Chicago Press). Finding illusory the Hobbeian claim that man is animated solely by a "perpetual and restless desire after power, that ceaseth only in death," he remarks, almost as an aside: "we are the only people who think themselves risen from savages; everyone else believes they descend from gods."

The whole question of human ancestry—especially the ancestry of mind—may need reconsideration.

REVIEW ONE PRICE OF CHANGE

THE story of farm labor in California is one of the grimiest and most agonizing chapters of American history. Its impact began to reach the general reader with publication in 1939 of John Steinbeck's Grapes of Wrath, the best known of several novels in which Steinbeck dramatized the unrelieved pain and lifelong victimization of men, women, and children who know how to work the land but have none of their own. (Other books by Steinbeck on this theme are In Dubious Battle and Of Mice and Men.) Big farming in California began during the years after the gold-rush of 1849 A relatively few men acquired large tracts of land, often by devious and fraudulent means, and began to grow wheat. When it became evident that fruit would be a more profitable crop, the big farmers needed a large supply of temporary labor to harvest these perishable products and get them on the trains of the transcontinental railroad (which had been completed in 1869) for shipment to eastern markets. A decline in the price of wheat in 1870 hurried the change to other crops, and to collect them in the fields as they became ripe the farmers hired, successively over the years, crews of Chinese, Japanese, Hindus, Filipinos, Mexicans, and finally the American "Okie" refugees from the dust bowl of the 1930s, of whom Steinbeck wrote.

There are dozens of books on this subject. Carey McWilliams' *Factories in the Field* (1939) describes the conditions of work on the big California farms during the period of the "Great Strikes," in effect documenting Steinbeck's novels. In *As You Sow* (1947), Walter Goldschmidt provided basic clarification of the cultural and economic factors which shaped California agriculture. The California farmer, he showed, is essentially a businessman; he thinks in terms of dollars, not about growing things. The focus is always on the cash crop. Farmers who failed to think in this way were gradually driven off the land. For most of those who were successful,

farm labor has never been much more than a necessary evil.

We now have for review an intensely interesting book, Cesar Chavez: Autobiography of La Causa (Norton, 1975, 10.00), by Jacques Levy, which brings this story up to date. The author practically lived with Chavez during the six years it took him to put together this web of current history with material from countless interviews and intimate personal experience. It is the story of the struggles of a union organized by a man-of Mexican origin-who had himself worked in the fields as a migrant laborer from boyhood. Today that union, the United Farm Workers of America, AFL-CIO, has eighty-four contracts involving thirty thousand workers, and is negotiating ninety more, which will double the active membership of the union.

The measurable success in organizing migrant labor achieved by Cesar Chavez and his colleagues and supporters seems almost unbelievable to anyone acquainted with the obstacles which had to be overcome. As a leader, Chavez combines qualities that would hardly be expected to emerge under the cruel and seemingly hopeless conditions of the penniless and almost homeless workers, now predominantly Mexican Americans, who harvest California's crops. Chavez brought the vision of nonviolence to the farm worker movement, adding his personal understanding of how the workers felt, what they needed, and what they would respond to.

As a Gandhian, Chavez is essentially a communitarian, yet the task of his life—to bring a living wage and decent working conditions to one of the most wretched of all the groups of laboring people in the country—requires confrontation with the very antithesis of community institutions. His goal is decent labor policies on the part of the enormous industrial farms operated by large corporations staffed by persons who regard community ways as juvenile, sentimental, and economically ridiculous.

The story of the opposition between these two points of view makes a magnificent illustration of the extent to which genuine social ideals can be preserved throughout an utterly ruthless economic war. It is a principle with Chavez that the human decencies must be preserved even in wholly indecent situations. The book is an account of a heroic fight for economic justice, but it is equally the story of this man's unbending determination to fight with the right means. In one place, speaking of the boycott of table grapes, which finally secured contracts with the major growers in this field, he says:

The boycott demonstrated to the whole country, the whole world, what people can do by nonviolent action.

Nonviolence in the abstract is a very difficult thing to comprehend or explain. I'd read a lot, but all of it was in the abstract. It's difficult to carry the message to people who aren't involved. Nonviolence must be explained in context. . . .

The whole essence of nonviolence is getting a lot of people involved, vast numbers doing little things. It's difficult to get people involved in a picket line, because it takes their time. But any time a person can be persuaded not to eat a grape—and we persuaded millions not to eat grapes—that's involvement, that's the most direct action, and it's set up in such a way that everybody can participate.

Nonviolence also has one big demand—the need to be creative, to develop strategy. Gandhi described it as moral jujitsu. Always hit the opposition off balance, but keep your principles.

Strategy for nonviolence takes a tremendous amount of our time—strategy against the opposition, and strategy to strengthen our support. We can't let people get discouraged. If there's no progress, they say nonviolence doesn't work. . . . And it's only when they are desperate that people think violence is necessary.

Of course it isn't. If any movement is on the move, violence is the last thing that's wanted.

Naturally, nonviolence takes time. But poverty has been with us since the beginning of time. We just have to work for improvement. I despise exploitation and I want change, but I'm willing to pay the price in terms of time. There's a Mexican saying, "Hay mas

tiempo que vida"—There's more time than life. We've got all the time in the world. . . .

By and large, people oppose violence. So when government or growers use violence against us, we strategize around it. We can respond nonviolently, because that swings people to our side, and that gives our strength. . . .

And while the philosophy of nonviolence covers physical, verbal, and moral behavior, we haven't achieved that goal. If we can achieve it, we're saints—which we're not. We're still working on eliminating physical violence, though that isn't all, by any stretch of the imagination. After workers begin to understand physical nonviolence among people, then we also apply it to property and go on from there.

Cesar Chavez was twelve years old when the family farm on which he grew up in Yuma County, Arizona, was bulldozed before his eyes by the new owner who had bought it for the taxes his father had been unable to pay. The loan to which his father was legally entitled to help him pay his taxes was blocked by the local banker who was the wealthiest grower in the area and wanted the land. Eviction and the bulldozing came two years later, and the Chavez family took off for California where, it was rumored, they might find land or work. "Like my dad," Chavez says, "the flood of poor entering the state had no idea that most of the land was owned by large corporations and wealthy growers who welcomed this torrent of labor only because it drove down wages."

There is a lot of disgust expressed in this book, but no hate, unless it be on the part of the growers, and by some of the representatives of the Teamsters, the powerful and rich union which for long years attempted to displace the Chavez organization as the bargaining agent for the farm workers.

The early pages are devoted to the toughening experiences Chavez went through as a young man, and to the two or three remarkable individuals from whom he began to learn how to help the migrant workers. For a time he worked with the Community Service Organization, learning something about organizing people to

help themselves. In 1958 and 1959 he was working in Oxnard, where the unemployment created by the braceros (crews of farm workers brought in from Mexico under a federal law passed during the war) had thrown thousands out "The biggest bracero camp in the country was in Oxnard, a complex of camps which housed about twenty-eight thousand workers." Chavez fought the bracero program on the ground that the jobs belonged to the local workers, not only morally but by law. One of his early triumphs was in proving that the law was being ignored by the growers with the help of officials. Some members of the Farm Placement Service lost their jobs, but the evils continued, mainly, Chavez thought, because the farm workers themselves were not organized in a strong union. He quit his job with the CSO on his thirty-fifth birthday, in 1962, resolving to give all his energies to organizing what was known as the National Farm Workers Association. That was only fifteen years ago, and today, as everyone knows, the union, presently called the United Farm Workers of America, is a power in the land. While Cesar was out organizing in the early years, his wife picked grapes five days a week for eighty-five cents an hour to keep the family fed.

The story told in this book cannot be summarized in a review. The most we can hope for is to convey the temper of a man and a movement. The spirit of the beginning—which continues to this day—is shown by these recollections by Chavez:

Slowly we began to build a community. Dolores Huerta [who had worked with CSO] came, and I told her, "You have to leave your job. You can't work for a living and fight. You've got to do one or the other. You've got to do this full time. You take your choice."

So she said, "I'll come."

"Okay. If you give up your job."

"How will we eat?"

"I don't know. We'll eat something."

And I didn't know. But as we later found out, somebody in the Cause would never starve. The people would never let you.

Mr. Levy has done a magnificent fob of weaving together the very nearly countless threads of a wonderful and inspiring story.

COMMENTARY LEARNING FROM NATURE

GOOD intentions, says E. F. Schumacher (p. 6), come to nothing if there is no change in "the shape of the technology." Lewis Mumford says: "I've never supposed that the things which the group which I was associated with stood for were capable of achievement under the present conventions of capitalism and large-scale organization, which exclude the human being." In an article in the current (November) issue of the Journal of the New Alchemists (Box 432, Woods Hole, Mass. 02543), extracts from which appear in Not Man Apart for Mid-September, John Todd says much the same thing in the language of the Missing in our socio-economic life sciences. organization and structure are the principles of balance that everywhere operate in nature, reconciling the tensions between the parts and the whole:

Each sub-unit in an interlinked global system, whether it is an agricultural or manufacturing unit or a transport system, is incomplete. This is a fundamental difference between the structure of society and that of the living world. In the living each sub-component. while interdependent, is at the same time a complete unit, whole and autonomous. In this way two opposite tendencies are fused by nature. For example, a cell is capable of carrying out all the functions normally attributed to life, and as such is a mirror image or reflection of higher levels of organization. It predicts the organism of which it is a component. . . . In nature a continuity exists in which the smallest living element is an image of each level of organization.

In the living world, evolutionary design is continuous and highly adaptive. Inherent in its adaptability may lie some of the clues essential to attempting a synthesis of modern knowledge. . . . It is at once architecture and structure; it is also a dynamic process, developing unity where chaos would be otherwise.

The present socio-economic structure, Mr. Todd points out, is not adaptive, but stands in the way of needed changes. What would be the *right* structure? New Alchemy's Ark, installed a year

ago on Prince Edward Island, is intended to provide some clues. Mr. Todd's article considers the holistic "predictions" implicit in the function of this life-support system.

CHILDREN

. . . and Ourselves

QUALITIES OF COMMUNITY

THE spirit of the ancient Irish Brehon laws—which called for "the making good of any injury caused, as opposed to the common law principle of punishment"—seems to have been widely present on the American continent be fore the advent of the A correspondent for the Christian white man. Science Monitor (Jan. 28) tells what he learned during a visit to Albuquerque, New Mexico. Little by little, around the country, Indian tribes are regaining the right to dispense justice among themselves according to their own traditions. There are now a total of 122 Indian courts. Unfortunately, some of these courts are imitating Anglo procedures, but there is a strong effort in some areas to build a legal system based on Indian values.

"Articles on Indian courts seldom get past the image of the jeans-clad judge," says Sam Deloria, director of the American Indian Law Center here, the only one of its kind in the country.

He and his colleagues feel that there are a number of fundamental differences between traditional Indian concepts of justice and those of the white man—differences that should be preserved in Indian law.

"The Indian theory of criminal justice, for instance, is completely different from yours," says Mr. Deloria. A human being to the Indian is one who is in harmony with his community and the world. A person commits a crime only when he is out of tune. Therefore, the purpose of criminal proceedings is to assist that person to re-establish harmony with the community.

Indians are more interested in rehabilitation than in retribution, he says. Thus penalties tend to be less severe. Sometimes the requirements are just symbolic, such as dancing in a religious ceremony. Restitution, a concept long out of favor in white courts, is an Indian favorite. In a recent case on the Fort Madison Reservation, for instance, a young burglar was ordered to repair the store he tried to break into.

"By acknowledging his crime and paying for it, the individual psychologically re-establishes his relationship to the community," explains the Indian law expert.

"I just don't understand why 'Anglo' courts do not force juveniles to make restitution," adds Thelma Stiffarm, author of a model juvenile code for reservations.

The Indian legal experts criticize Anglo law as being too procedural, with lawyers contesting "like gladiators" over technical points instead of being concerned with "fundamental fairness." And they express concern about the effects of imposing this form of justice on the reservation.

Interestingly, a few cities have been attempting to apply the idea of restitution instead of punishment. It works in some cases, and the judges who try it have been much encouraged. An obstacle, however, is the lack of a real community which has some harmony for the offender to get back in tune with. Another *Monitor* article (Feb. 9) relates the experience of Judge Sam L. Summers in Ravenna, Ohio, who had the case of a sixteen-year-old boy who had driven a car across a neighbor's lawn and knocked down a shoulder-high pine tree. When restitution was proposed, the neighbor asked for \$500! Disgusted, the Judge turned the case over to a Small Claims Court which decided that the plaintiff should have \$12 for his damaged tree.

Even so, despite the general lack of community, a Los Angeles judge, Arthur Gilbert, presiding judge of the Los Angeles Judicial District, is impressed by the success of his policy of referring offenders to a service organization that finds them appropriate employment in behalf of the public good. Some two thousand persons guilty of misdemeanors have been placed in jobs by the Voluntary Action Center of Los Angeles. Speaking of the program, Judge Gilbert said:

The response has been fantastic. One man worked at a drug rehabilitation halfway house, and he became so turned on to helping its clients they hired him. Another man was assigned to set up playground equipment at a park. He got so involved with the kids that he kept going back on his own.

In another case, a dental student charged with assaulting a policeman was assigned to do dental lab work in a hospital. This community work is entirely voluntary—that is, the offender is free to prefer to go to jail.

The second *Monitor* story (Feb. 9) relates:

In Philadelphia Family Court Judge Edward Rosenberg found a 16-year-old boy guilty of scrawling graffiti on the walls of his freshly painted junior high school. But instead of sending him to serve time in a youth home, the judge sentenced him to 25 weeks of cleanup duty—two days a week, three hours a day. . . . In Atlanta, a youth stole and wrecked a car. He was ordered to work for the insurance company to repay the loss. The company has since hired him as a regular employee.

There seems supreme common sense in these "sentences," and it is reported that the federal Law Enforcement Assistance Administration is now footing the bill for evaluating restitution programs in seven states.

Judges can no doubt do their part, but in many cases the reason for the success of such remedies lies in the fact that some little spot of still existing "community" was found to help them work.

Another approach to this problem—a study of the kind of society a great many Americans have helped to generate—is described by Robert Coles in the September Atlantic. This child psychiatrist, author of Children of Crisis, also knows a great deal about the young of the rich and what is done to them by parents determined to give them "every advantage." After speaking of the maturity and perceptiveness often evident in working-class children whose privations have led to pondering and reflection he tells about a child of the fashionable rich—"a New Orleans girl I knew, who in her own fashion, once tried to come to terms with what she several times referred to as her 'one and only chance,' by which she meant nothing less than her life."

... when she was eight she had a habit that puzzled worried her parents, for the short time that it lasted... the girl liked looking out of the window of her parents' mansion. Across the street was one of those striking New Orleans cemeteries—the graves, elaborate and various tombs, all above ground.... She wondered about who "those people" were, the departed. She wondered what kind of lives they lived, what they could tell her about those lives. She was struggling for detachment, perspective, and

humor about the world she was a part of. She was, in her own way, meditating about life's meaning.

But alas, she told her parents. They were quizzical the first time; annoyed the second; admonitory the third, worried the fourth; and ready to consult a doctor the fifth. They did call a doctor; he urged intelligent restraint, and his advice proved correct. Not that there was, actually, restraint. The girl was implicitly and sometimes directly told to get on with it—life. She was, her parents decided, "a little too introverted." She had best be made "busy." They knew the enemy—inwardness. They knew the point of life: the headlong rush; the ferris wheel at the age of six, the assembly dance at the age of sixteen; the full calendar; the school choir, everyone beautifully, expensively, similarly dressed; the clock that keeps moving; the night dream that is promptly forgotten; the sigh before retiring that registers satisfaction and congratulation—no wasted time.

After a while the mother stopped worrying. "I guess she's all right," she said. "All children do a few crazy things, before they get sensible." And she was right, Dr. Coles says—"just about all children do have their strange, wondrous, luminous, brooding, magical, redemptive moments."

This article by Dr. Coles deserves special attention. One could call it a fine example of what Hannah Arendt once called "resultless thinking"—the kind of thinking that leads to no specific act, but which may in time give illumination and delicacy to everything one does.

FRONTIERS

The Common Foundation

WHETHER or not there is a real energy crisis—or only an energy monopoly crisis, as Ralph Nader suggests—one thing seems absolutely certain: the cost of energy will continue to go up. Americans now complain that they have to pay as much as seventy cents for a gallon of gas. How long will it be before they pay \$1.50 or more, as many Europeans already do?

We'll adjust, of course we'll have to—just as we are learning to adjust to other increasingly unpleasant realities of the urbanized mass society. Most people are resigned to this discouraging view of the years to come, hoping only that really serious energy—and then food—shortages will be put off as long as possible.

We keep quoting E. F. Schumacher in these pages because he is the one who explains most dearly why there are several worse-thanunpleasant things in the making for our future that nobody can adjust to, and he also offers sensible, workable plans for avoiding them. Patterns," his contribution to Resurgence for May-June, he goes over the familiar ground of how modern cities became vastly overgrown within the past century and a half. Today urban concentration is almost unbelievable. In the United States seventy per cent of the population live on only a little more than one per cent of the land, according to Charles Abrams. Why do so many people desert the rural areas and go to the cities? The reasons are various, some good, some bad; Schumacher's point is that only cheap fuel made it *possible* for cities to grow to their present enormous size. Only what seemed an unending supply of low-cost fossil fuel pumped out of the ground has enabled the cities to supply food to people who, living in completely paved surroundings and working in offices and factories, can raise none for themselves.

So, two things made cities possible: cheap fuel and dramatic advances in agricultural

technology, enabling a few people running machines on the land to feed the millions in the cities.

Today, as is well known, vast quantities of fossil fuel are used in farming as well as to transport food. It follows that when the cost of fuel goes up, so must the cost of food. Obviously, a time will come when people can't afford to buy enough food. Only a small proportion of the urban population is really affluent, able to endure such rising prices. Obviously, the great cities are doomed to become nightmare scenes of hunger, hopelessness, and rebellion.

What can be done? The major difficulty is that the return of people to rural areas requires both rational encouragement and a full understanding of the problems involved. The reason why so many people left the country was that they couldn't make even a bare living there—they couldn't compete with the massive, impersonal technology of the enormous farms, and in the country there was nothing to do but farm. So, as Schumacher points out:

Although man shapes technology, once he has shaped it technology tends to shape him. It shapes him, his pattern of settlement, his life style, and it also, as it were, determines the "essence" of his political system. That is to say, the "shape" of technology has become the dominant formative agent, and without changing technology nothing important can be changed. The good intentions of town and country planners come to nothing; vast public expenditure comes to nothing, even political revolution changes nothing except the composition of the ruling clique *unless there is also a change in the shape of technology*.

The need is for a technology of efficient, small-scale production scattered throughout rural areas all over the world. America, Schumacher thinks, may be the best place to begin—where, indeed, on a small scale it has already begun.

He has a striking example of the sort of thing that becomes everyday experience—not even noticed—in a society that has subordinated its economic and social life to the necessities of uncontrolled growth and mass marketing methods, geared to an out-size technology which keeps on getting bigger and bigger:

If I drive from London to Glasgow on the big, we call it the M-I, motorway, I find myself surrounded by huge trucks carrying cookies from London to Glasgow. If, in the din and strain of the operation, I can look at the other carriageway, I find an equally big fleet of trucks carrying cookies from Glasgow to London! Any objective observer from another star would infallibly conclude that to get the right quality in cookies you have to transport them at least 500 miles! Well now, how do we understand this? I mean, the business people are not mad. They are sound calculators. That's why we have to understand why this happens. I mean, those who say it is consumer free choice, they are talking rubbish. The consumer couldn't care less.

Meanwhile, in America, trade experts in the bakery industry are declaring sententiously that the trend is toward larger bakery units prepared for distribution up to 500 miles from base. "So," as Schumacher remarks, "instead of putting a bit of intelligence into the design of small-scale, really efficient bakeries, so that you can get the real thing around the corner, as it were, we are still putting it in the wrong direction."

People talk about "planning" as the secret of success, but what success can there be in technology that may be completely obsolete in ten or twenty years because the cost of transport has raised the price of bread or cookies higher than any but the rich can pay? The rich are not a good market for bread; there are too few of them, and will probably be fewer as time goes on.

It is especially interesting to see how both good economics and good "other things," such as architecture, all have the same, essentially humane, foundation. In a BBC interview last October, Lewis Mumford was asked what hopes he had for better architecture under our present mode of economic life. He said:

I don't think there is any chance of a good architecture spreading and having its roots in the community unless the basic institutions by which we are governed are radically changed. I've never

supposed that the things which the group which I was associated with stood for were capable of achievement under the present conventions of capitalism and large-scale organization, which exclude the human being.

Asked why he no longer writes about architecture, replied:

Because the real problems of civilization aren't soluble by the architect or by any one group of people. The real problems are much more profound, and will require a much more thorough study. That's why my work during the last fifteen years has turned away from the specific problems of building and of architectural form. I interpret what's been doing and see the dangers of the sterile forms as inducing us to accept the sterile life as an acceptable mode of living, but our problems are the problems of controlling nuclear energy, the problems of lessening the amount of industrial pollution, the problems of making the environment itself relatively stable and self-renewing and favorable to life of every kind, not just to man's life. We have to look after the bacteria and the insects as well as man, if we're to have a really balanced environment. This is the profound meaning of the whole ecological process, which is now gradually seeping into people.

This interview with Mr. Mumford was reprinted in *Tract* No. 22, a quarterly issued by the Gryphon Press, 38 Prince Edwards Road, Lewes, Sussex, England.