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WHAT IS "MORALITY"?

IN *Science* for last Dec. 26, Joseph Adelson, a psychologist who is convinced that "psychology cannot do the work of morality," reviews a volume of papers titled *Moral Development.* The contributors seem persuaded that psychological investigation of this subject will help modern man to "avoid or correct" such moral disasters as My Lai, Watergate, and similar "lapses from decent behavior," but the reviewer remains skeptical. After summarizing the conclusions of one report he asks:

> To what degree can we generalize from the necessary artificialities of the experiment to the murk and tumult of real life? Is the extraordinary cost of such research in time and energy worth the empirical yield?

Of two other contributions he writes:

> The very excellence of these papers reminds us, paradoxically enough, of the essential thinness of secure learning in the field. We see two strong minds struggling toward some synthesis of knowledge, when the findings that would support the effort are unavailable. Many of the known answers are partial or in doubt, and what is worse, most of the important questions have not yet been asked.

In short, Mr. Adelson does not find this attack on the moral problem at all promising:

> To the contrary, this volume reminds us forcefully of the underdevelopment of psychology as a science, of its difficulties when confronting any truly complicated realm of behavior. So the reader will not learn from this book how to prevent a Watergate, or how to raise a virtuous child or even how to improve his own character, but he may learn quite a bit about the intellectual and empirical habits of social and development psychologists when they grapple With great issues.

Missing in the book, he says, is historical perspective on the question of moral development, and the reviewer notes that only ten years ago "the systematic study of the moral life was essentially moribund." Why was this the case? Were no moral problems or issues in evidence in 1965?

The question no doubt seems ridiculous, yet if we go back a little further in cultural history we are able to see why some of the individuals most concerned with human welfare felt that talk about and instruction in "morality" had itself been at the root of the most serious disorders of the time. The February, 1946, number of *Psychiatry,* a monthly journal issued in Washington, D.C., published a lecture by Brock Chisholm, a leading Canadian psychiatrist who later became director of the World Health Organization. His subject, which he took very seriously, was an inquiry into the conditions of enduring peace. With the horror of the war so recently ended fresh in his mind, he asked what made people vulnerable to the claims and irrational appeals of militarism. He began by saying that the psychological burdens of inferiority, guilt, and fear prevent people from gaining the maturity to prevent the outbreak of hostilities. Maturity brings the capacity to make one's own decisions. Without it human beings will continue to be led off to endless wars.

Why do people fail to reach maturity? To this psychiatrist the answer seemed plain. The force which invades human life with feelings of inferiority, guilt, and fear is, he declared, *morality.* The very concept of right and wrong is debilitating. The idea of sin is emasculating. Dr. Chisholm put his argument forcefully:

> The necessity to fight wars, whether as aggressor or as a defender who could have, but has not, taken steps to prevent war occurring, is as much a pathological psychiatric symptom as is a phobia or the anti-social behavior of a criminal who has been dominated by a stern and unreasonable father. They are alike irrational behavior patterns resulting from unsuccessful development and failure to reach emotional maturity. It is evident that this failure is

usual in the whole human race and has been throughout historical time.

For a cause we must seek some consistent thread running through the weave of all civilizations we have known and preventing the development of all or almost all the people to a state of true maturity. What basic psychological distortion can be found in every civilization of which we know anything? It must be a force which discourages the ability to see and acknowledge patent facts, which prevents the rational use of intelligence, which teaches or encourages the ability to dissociate and to believe contrary to and in spite of clear evidence, which produces inferiority, guilt and fear which makes controlling other people's personal behavior emotionally necessary, which encourages prejudice and the inability to see, understand and sympathize with other people's points of view. Is there any force so potent and so pervasive that it can do all these things in all civilizations? There is—just one. The only lowest common denominator of all civilizations and the only psychological force capable of producing these perversions is morality, the concept of right and wrong, the poison long ago described and warned against as "the fruit of the tree of knowledge of good and evil."

How does "morality" work its ill against mankind?

For many generations we have bowed our necks to the yoke of the conviction of sin. We have swallowed all manner of poisonous certainties fed us by our parents, our Sunday and day school teachers, our politicians, our priests, our newspapers and others with a vested interest in controlling us. "Thou shalt become as gods, knowing good and evil," good and evil with which to keep children under control, with which to impose local and familial and national loyalties and with which to blind children to their glorious intellectual heritage. Misguided by authoritarian dogma, bound by exclusive faith, stunted by inculcated loyalty, torn by frantic heresy, bedevilled by insistent schism, drugged by ecstatic experience, confused by conflicting certainty, bewildered by invented mystery, and loaded down by the weight of guilt and fear engendered by its own original promises, the unfortunate human race, deprived by these incubi of its only defenses and its only reasons for striving, its reasoning power and its natural capacity to enjoy the satisfaction of its natural urges, struggles along under its ghastly self-imposed burden. The results, the inevitable results, are frustration, inferiority, neurosis and inability to enjoy living, to reason clearly or to make 4 world fit to live in.

The grounds of the indictment are persuasive but not new. Dr. Chisholm might have called a number of illustrious witnesses to his support. For example, two hundred years earlier, the French *philosophe,* Julien de Lamettrie, said practically the same thing in *Man a Machine* (1748):

If Atheism were universally disseminated, all the branches of religion would be torn up by the roots. Then there would be no more theological wars: there would no longer be soldiers of religion, that terrible kind of soldier. Nature which had been infected by the consecrated poison, would win back her rights and her purity. Deaf to all other voices men would follow their own individual impulses, and these impulses alone can lead them to happiness along the pleasant path of virtue.

These few words express well the foundations of the naturalistic conception of man which took root in the eighteenth century. It became the basis of revolutionary optimism and the justification of the anti-clericalism of practically all subsequent revolutionary movements, including present-day communist parties and societies. While the rejection of "morality" has been explicit in nearly every form of overt political radicalism, it remained tacit and merely implied among the scientific thinkers who felt that established religion had already been sufficiently disarmed of influence by the widespread secular spirit, strongly reinforced by Darwinism and by the generally accepted conception of scientific knowledge as quite independent of any religious teaching. Dr. Chisholm was one of the few who dared to speak out openly against inherited moral ideas, feeling that they still confined and weakened the Western mind, rendering both young and old incapable of resisting the perverse and criminal uses of power.

Today, however, as publication by psychologists of a work titled *Moral Development* indicates, a far-reaching change among the scientifically inclined is plainly in evidence. What

has been left out of our approach to human relations? is the question implied, if not asked, by such a book.

It has taken the scientists a long time to raise this question. Only a century after the *philosophes* had made the naturalistic position the only acceptable outlook for advanced and "progressive" thinkers, a poet, Alfred de Musset, looked about him and asked:

> Sleepest thou content, Voltaire?
> Thy dread smile, hovers it still
> above thy fleshless bones!
> Thine age they called too young to understand thee;
> This one should suit thee better—
> Thy men are born
> And the huge edifice that, day and night, thy great hands undermined
> Is fallen upon us. . . .

A similar comparison could be drawn between John Locke's iconoclasm and today's cultural criticism. Like Lamettrie, Locke was determined to rid the world of theological distortions of human nature. He decided that an attack on the doctrine of "innate ideas" would give the best guarantee against future infection. Explaining Locke's intentions, Carl Becker wrote in *The Heavenly City of the Eighteenth-Century Philosophers:* "What Locke aimed at, no doubt, what the eighteenth century acclaimed him for having demolished, was the Christian doctrine of total depravity, a black, spreading cloud which for centuries had depressed the human spirit." But making man a morally neutral blank, shaped entire by impressions from without, had unforeseen effects on the cultural and economic life of future generations. Self-interest became the foundation of Locke's political philosophy, and since Locke was a major influence in shaping the opinions of Americans, he is now identified as the source of our "inordinate emphasis on self-interest." Moral issues are discovered to be real, once again.

Brock Chisholm, one might say, was practically the last of the distinguished Enlightenment spokesmen. We need not quarrel with him much; there is ample truth in what he had to say. And what he did not say is finally beginning to be investigated, if only in the cautious and tentative terms of such books as the volume on *Moral Development* noticed in *Science.*

But what, actually, did he fail to say? In his passion for freeing the minds of the young from presumptuous dogma, he overlooked the underlying reality of the *moral sense* in human beings. His recommendation was simply to teach the young to do "honest, simple and clear thinking." He did not attempt to tell how. While in effect advocating the natural practice of Virtue—somewhat as the Founding Fathers had urged it in speaking of the "pursuit of happiness"—he did not spell out the meaning of Virtue, just as the Founding Fathers usually left the idea of Happiness undefined. Trusting to the "natural urges" and the "individual impulses" of people does not, it now seems clear, invariably lead them "along the pleasant path to virtue." Something more is needed, and today the old Platonic inquiry, "Can virtue be taught?", is being renewed.

In championing "honest, simple and clear thinking," Dr. Chisholm gave insufficient attention to the incentives of a life so guided. He was concerned only with getting rid of the bad habits which make such a life impossible. In the wake of the most terrible war in human history, he concentrated on removal of the obstacles to decency and the exercise of impartial intelligence, apparently convinced that putting an end to the authority of the tyrannical "superego" (Freud's name for conscience) would permit all the fine qualities of human beings to express themselves freely. He said nothing to suggest that those qualities might need to be sought out, aroused, and fostered.

Thus a profoundly important question remains: Is there, beneath all the blighting self-condemnation of false guilt feelings, an authentic conscience that needs to become active?

Interestingly, another psychiatrist, one equally concerned with the goals declared by Brock Chisholm, wrote directly on this question. In *Neurosis and Treatment—a Holistic Theory* (Viking paperback, 1973), Andras Angyal explored at length what he called the *duality* of conscience:

> It seems to me that in the classical psychoanalytical formulation of the superego, the problem of the healthy conscience is not touched upon. The superego appears as a central accident, a necessary evil; it is not inherent in human nature as such, but is an extraneous result of social development, something required not by the individual but only by society. Actually it boils down to fear of punishment or ostracism. The assumption is that, except for this ever-present fear, everyone would break the Ten Commandments and obey the 11th: Thou shalt not get caught.

Could there be a better identification of the guiding rule in all the Watergates of our time?

Dr. Angyal confirms what Dr. Chisholm says, but adds recognition of a positive moral identity in man:

> There is no doubt that fear of punishment lives in all of us and that many of the "moral principles" we feel to be our own originate in this fear, but that is not all there is to conscience. There is another aspect which does not depend upon swallowing something that has been forced down one's throat by society, but expresses certain value attitudes inherent in human nature. . . . Guilt generated by this conscience may be termed "real guilt." It is not fear but an emotional reaction to having acted against somebody or something with which one is genuinely identified such an act of disloyalty is also an offense against one's own integrity. . . .
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> Guilt based on love is radically different from guilt based on fear of retaliation, but in many instances the two are so closely interwoven that it is useful to have a term which covers the whole complex. Both kinds of guilt feelings can be called superego functions; the term conscience, however, should be reserved for the pattern which underlies the experience of real guilt. To disentangle the different roots of guilt is not simple. . . . We have the double task of freeing the patient from pangs of "conscience" which are ultimately based on irrational fears, and of awakening and strengthening his real conscience, making him feel real guilt. This second goal is fully as important as the first, if not more so. The patient's insight, accompanied by a feeling of guilt, into the nature of his neurosis as a self-betrayal and a betrayal of others is a necessary step in the development of his motivation for reconstructing his life.

Those who turn to Dr. Angyal's book for further discussion will find that the chapter on Guilt deals with essentially the same struggle that Socrates deals with in the Dialogues. Both are endeavoring to reject the false and the spurious and to embrace the true. The seed of self-discovery Angyal finds in genuine conscience. Socrates discovers it in the *eros,* the essential love of truth which drives the person in whom it awakens to find the best answers he can to the ultimate questions.

It is indeed in the mood of the times for there to be a great and determined return to the attempt to teach virtue to not only the young, but people of all ages. It would be fortunate if the enthusiasts of this effort would consult Plato before formulating their new "methodologies," and study the history of the Enlightenment for an understanding of the over-simplifications and negations that have been endlessly repeated during the years since.

How difficult it is to speak with any confidence of such matters! The reaching, hoping language that men use to comfort themselves and to urge one another on in the quest for truth, becomes, for a later generation, the language of false optimism, speculation, and self-deception. The oscillations between high expectation and tough-minded doubt, between ardent enthusiasm and contemptuous exposure of extravagant dreams have very largely made the framework of the cultural history of mankind. Getting above these polarities is obviously a task of the present. If there are any experts in this, they are the ones to look to for help.

Dr. Angyal is certainly a member of this company. A chapter in his book, "The Theory of Universal Ambiguity," may in time be recognized

as providing insight indispensable to understanding the human condition. While the collection of facts and the making of definitions have obvious value, the ultimate dependence of human health and welfare on stance and mood gives philosophic attitude absolute priority. How does one view the self, the world, and the relations between the two? Dr. Angyal proposes a simple polarity:

> One outlook, while not indiscriminate optimism, reflects the confidence that the "supplies" for one's basic needs exist in the world and that one is both adequate and worthy of obtaining these supplies. The neurotic belief is that these conditions are not available or that they can be made available only by extremely complicated and indirect methods. Thus, in one way of life, the . . . basic human propensities function in an atmosphere of hope, confidence, trust, or faith if you like. In the other, the propelling forces are the same, but they function in an atmosphere of diffidence, mistrust, and lack of faith. Phenomenological concepts such as hope, trust, and faith have not yet achieved a clear position in systematic theorizing, but no one can doubt that these states as well as their opposites, do exist and are extraordinarily potent irrespective of whether or not they can be translated into current psychological concepts. Confidence and diffidence, conviction and doubt that human life is livable in this world, mark the "great divide," the point at which our path bifurcates and our life acquires its dual organization and its basic existential conflict.

Exclusive preoccupation with "facts" hides the control exercised over our lives by the hardly conscious decisions we make about where we stand in relation to these feelings. The "facts" are only superficially at issue: what counts, in relation to ourselves and others, is how we read them:

> In the healthy orientation it is possible to perceive wholes, to see things in a wide perspective, to receive impressions which point beyond the datum itself, continuity and intentionality make the world meaningful. In the neurotic orientation, the things and events of the world appear as isolated items or fragments. The long view is replaced by shortsightedness; the fresh outlook yields to a stereotyped and biased one. Impressions cannot be fully valued and enjoyed because their pointing quality, their "message character," is lost; the result is a truncated experience.

"The world visualized in the healthy pattern," Dr. Angyal says, "feels like one's home; it is rich in opportunities, lawfully ordered, and meaningfully related to the person." This seems an articulate expression of the deepest longings of the modern world. It is another surfacing of the Platonic *eros*—born, this time, among a people hungry for rebirth and renewal, instead of to an age of disintegration and decline. But before that renewal can send down roots and spread, it may be necessary to evolve a coherent rational foundation for understanding the moral roots of human life.

REVIEW
THE UPHILL ROAD OF VISION

WAR, Randolph Bourne declared some fifty years ago, is the health of the State. Today that proposition has had final confirmation, and most thoughtful people agree that the epoch of the modern nation-state is about over. What then shall we do about the state, which is still controlling and mismanaging the affairs of men?

What produced the modern state? It grew out of the combination of Enlightenment social ideals with a series of compromises which we now see to be incompatible with the high expectations of the eighteenth-century Revolutionists. Liberty was turned into a justification of rampant self-interest; Equality was explained as involving an open field for aggressive acquisition; and Fraternity became an alliance of the righteous and the strong, with grudging assistance to those who fall by the wayside during the ruthless competitive struggle. The assigned task of government is to institutionalize these compromises and keep things working as smoothly as possible.

What then ought we to do about the State? We hardly know. Even modern radicals have a love-hate relationship with the idea of political power. They hate the existing uses of political power but find it difficult to imagine any great change in social and economic arrangements without the leverage of power. As long ago as 1909 Gandhi said that power and the good society are a contradiction in terms and proposed a new vision for both India and the modern world—a stateless society whose rules of health would naturally outlaw war and violence—but until recently only a handful have been able to recognize the prophetic element in his dream.

At first it was thought that Gandhi's thinking was relevant only for "under-developed" societies, but today, as the institutionalized corruptions of the eighteenth-century vision are breaking up before our eyes, and as E. F. Schumacher's advocacy of *appropriate* technology slowly gains support, the Gandhian solution is receiving closer attention. Yet there are very great problems and obstacles, both East and West. Those who labor directly for this sort of social and cultural change experience the present as a time of travail rather than triumphant new beginnings. The vehicles of the Gandhian vision seem hardly adequate for what reformers require of them, while the decaying institutions of the state have become intolerable roadblocks to progress.

This situation has now come to a head in India, where the structures of a modern nation-state have recently been erected over the scattered and impoverished remains of an ancient traditional society and culture. India had the immeasurable privilege of being the land where Gandhi's vision was given expression—a vision which made possible the liberation of the Indian people from British rule. Yet India is bound to the West by the adoption of Enlightenment ideals, which helped to fire her struggle for freedom and shaped her new institutions and laws; and she is bound, also, by the prestige of Western industrial progress, which turned out to be more persuasive than Gandhi's philosophic and moral criticism. Yet Gandhi remains the father of his country—loved and honored by people who are nevertheless unable to believe that his vision can be made to work in the modern world. So there is schism in India's cultural life, just as there is contradiction and frustration in the West. Day by day the question grows more intense: What shall we do about the State? How shall we cope with this monstrous creation, which is both our adopted principle of order and the administrator of our multiplying failures?

Perhaps because India's nation-state is less than twenty-five years old, and has been obliged to deal with almost insuperable problems—problems exacerbated by the typical ills of organized politics—this question has precipitated internal struggle there. The Gandhians themselves are not in firm agreement as to what course to take. How shall the State be persuaded to

cooperate with efforts to realize, if only step by step, the Gandhian dream? Should the State be pushed in the right direction, or, if it won't move, militantly opposed?

The difference of opinion between Vinoba Bhave and Jaya Prakash Narayan, the two leading Gandhians of today, is an example of the difficulty of deciding what to do. Vinoba, who recently ended a year of silence begun because of the split, is not in sympathy with J. P. Narayan's effort to achieve reforms in the state of Bihar by means of at least temporary involvement with political groups which oppose the regime of Indira Gandhi. Last June Mrs. Gandhi jailed Narayan (he was released recently, because of illness) and many of his supporters for attempting to bring about the dissolution of the Bihar assembly (state legislature) by non-violent means, and making other demands for reform.

The difference of opinion is concerned with means. J. P. Narayan holds that the corruption in Indian politics is so extreme that no progress in social reconstruction can be accomplished without radical changes in government organization and policy. Vinoba, apparently less dissatisfied with the regime of Indira Gandhi, now says of the objective of land reform: "We are not in a hurry. These things take time." (*New York Times*, Dec. 26, 1975.) Yet one might recall that twenty-one years ago, at the Sarvodaya Conference held in March, 1955, Vinoba declared that the Sarvodaya movement should press on to transform India into a "State-free" society by 1957! Perhaps this sense of urgency is now reflected in his disciple, Jaya Prakash Narayan, who gave up party politics in 1954 to join with Vinoba in the Bhoodan and Gramdan movements.

Since Jaya Prakash Narayan is now often in the news, a book and some pamphlet literature embodying his thinking may be of interest. The book is a biography, *Jaya-prakash Narayan* (Vikas Publishing House, 5 Daryangani, Ansari Road, Delhi 110006, India, 30 Rupees), the pamphlets are *Towards Fair and Free Elections* (5 Rupees) and *A Revolution in the Making* (2 Rupees), both available from People's Action, 223, Rouse Ave., New Delhi 1100011, India.

The biography concludes with a 33-page Appendix, "From Socialism to Sarvodaya," by Jaya Prakash Narayan—a statement issued to the members of the Praja Socialist Party at the time of his withdrawal from politics. This statement traces his changes of outlook and gives the reasons for his present views. Born in 1902, JP was in 1920 a promising undergraduate at Patna College, in Bihar, when he heard Maulana Azad, a distinguished Muslim, repeat Gandhi's appeal to students to reject education provided by a government dominated by an imperialist invader. Thousands left college as a result of this address, JP among them. Later he was able to come to the United States for his education. He remained in America for seven years—from 1922 to 1929—and as the result of exposure to the radical thinking of other students, mostly Europeans, he became a Communist. While Gandhi's noncooperation movement first attracted him, "the Marxian science of revolution," he said, "seemed to offer a sure and quicker road." But in time practical experience in Indian politics weaned him of the Indian brand of Communism. He discovered that a Kremlin-dominated party "is not a free agent but a tool of Moscow," and the Moscow Trials of the 1930s compelled him to re-examine the basic assumptions of Marxism. He was much impressed by the conclusion of Paul Baran (of Stanford University) that Stalinism was *"the political system that evolved from the drive to develop at breakneck speed a backward country threatened by foreign aggression and in the face of internal resistance."* The staggering crimes against old-time Bolsheviks during Stalin's purges made him question whether "good ends could ever be achieved by bad means." Finally, it was borne in upon him that the chiefly material goals of the socialist movement lacked the qualities that would assure true human freedom. Speaking of this realization, he said:

> My regret is that I did not reach this point in my life's journey while Gandhiji was still in our midst. However some years back it became clear to me that socialism as we understand it today cannot take mankind to sublime goals of freedom, equality, brotherhood and peace. Socialism, no doubt, gives promise to [bring] mankind closer to those goals than any other competing social philosophy. But I am persuaded that unless socialism is transformed into sarvodaya, those goals would remain beyond its reach; and just as we had to taste the ashes of independence, so future generations may have to taste the ashes of socialism.

Socialism, he decided, lacks a philosophy of life which enables the individual to rise above the level of materialist assumptions:

> The Marxists (and the materialists generally), having reduced consciousness to a behaviour of matter, naturally knocked the bottom out of ethics. They talk a good deal no doubt of revolutionary ethics, but that is nothing more than the crassest application of the theory that the end justifies the means. Once an individual persuades himself, sincerely or otherwise, that he is on the side of the revolution (or the party or the people) he is free to commit any infamy whatever. . . .
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> I decided to withdraw from party-and-power politics not because of disgust or sense of any personal frustration, but because it became clear to me that politics could not deliver the goods, the goods being the same old goals of equality, freedom, brotherhood, peace.

The importance of this statement lies in the fact that it is a record of a course of action resulting from an evolution of thought which brought mature recognition of the validity of Gandhi's vision. It is a process of growth into understanding of moral as well as material needs.

COMMENTARY
DISQUALIFYING THE STATE

THE question asked in this week's Review, "What ought we to do about the State?", is not answered, no doubt for the reason that dozens of answers are required. There are times when the rules established by the State are an indispensable utility, as when a policeman, armed with recognized authority, untangles a traffic snarl at an intersection and sends people on their way. But there are also times when the rules are blindly misapplied, as in the case of a homeowner in rural Mendocino County (California) who was provoked to exclaim, "Why should the building code require me to build my cabin according to regulations applying to a Beverly Hills condominium?" This man and a thousand or so other inhabitants of the hills in Mendocino are doing what they can to persuade the state to alter the code in relation to owner-built rural dwellings. These people are not opposed to building codes, which they recognize as socially necessary, but they want a code based on practical intelligence and administered, not as a weapon, but as an instrument of the common good.

But these matters, while useful as homely illustrations, seem unimportant when compared with the power of the State to conduct devastating wars and draft young men to kill other young men (and women and children) halfway round the world, and to do all the other things which exhaust the substance and hope of the people. It was Gandhi's idea that the State, so long as we need a State, must be controlled by the people. How could the State be controlled by the people? Only through their capacity and determination to practice non-violence and to work together for the good of all. By ordering their own lives, the people would take away the reason for State authority and finally make the State disappear altogether.

Jaya Prakash Narayan saw in the works of Vinoba Bhave—the Bhoodan and Gramdan movements—the bedrock foundation for the sort of society that Gandhi had in mind. With land to work, the peasants could become self-reliant and self-respecting. By spinning they could clothe themselves. With educational assistance they could improve cottage industry and restore Indian crafts, and through the Panchayat system (village rule by elders) govern themselves. This was Gandhi's program for making the State "wither away," which would take time. Meanwhile, he said: "Banish the idea of the capture of power and you will be able to guide power and keep it on the right path."

CHILDREN
. . . and Ourselves
GOALS FOR EDUCATION

AN article in *Defenders* (devoted to wildlife) for last October proposes that while animals kept in zoos are well fed and physically cared for, the most important aspect of a natural life for these creatures is inevitably ignored. The *challenge* of existence in their normal habitat is denied them. When we impose such conditions on human beings, the writer says, as in the case of imprisonment, we do it as punishment. We deprive them of the opportunity to solve their everyday problems. And this is exactly what we do to zoo animals, which have committed no offense.

The contributor to *Defender* may be entirely right, but the abolition of zoos seems unlikely until we have a better understanding of the human need for a related sort of freedom. We owe to A. H. Maslow the crucial distinction between deficiency needs—the need for food, clothing, and shelter—and those higher requirements, which he called Being-needs, involving exercise of a person's resourcefulness and moral qualities. Maslow endeavored to show that serious psychological distortions result when Being-needs are ignored.

Certain Being-needs are the subject of René Dubos' article in the *American Scholar* for the Winter of 1975. The lives of both young and old, he says, are made unnatural by the denial, especially in the professions, of responsibility to persons before they are thirty, and by the practice of retiring them automatically after sixty. Yet there is little evidence "that people between the ages of thirty and sixty are any more capable of creative work or of holding responsible positions than are younger or older adults." He continues:

> In my opinion, both these trends are biologically unjustified and socially destructive. They are an expression not of the influence of chronological age on ability to function creatively and responsibly, but of the fact that our society does not know how to create enough adult roles for able people.

Retirement customs and requirements, Dr. Dubos points out, are more influenced "by social considerations than by biological imperatives." There is a sense in which we cut off from productive activity people who are at the height of their capacities.

> There is, first, the well-recognized fact that chronological age does not rigidly determine physiological age and therefore does not constitute a good criterion of ability to function—physically or mentally, individually or socially. Of even greater importance is the fact that the operation of mental faculties is largely independent of ordinary biological vigor. As long as the vascular bed and physiological functions remain capable of supplying the brain with all the oxygen and the sugar it needs, the clarity of mental processes is preserved, and the person can continue a fairly normal range of personal and social activities.

The economic system has determined the way we think about work—as something unpleasant which enables us to take care of our deficiency needs. Machines are supposed to reduce the unpleasantness to a minimum, the goal being to eliminate "work" entirely. This idea is probably now on the way out, but the customs it established remain. Regarding these customs as disastrous in effect, Dr. Dubos looked around for examples of better arrangements, finding them described by Alexander Leaf, professor of medicine at Harvard, in a study of "three agrarian societies characterized by unusual longevity, great vigor even in old age, and remarkable freedom from chronic diseases." One of these societies is the Hunza, located on the borders of China and Afghanistan, another is in the Soviet province of Georgia, and the third is in Ecuador.

> Despite ethnic and cultural differences . . . these three agrarian societies have a few characteristics in common. In all three, people have an extremely frugal diet, they engage regularly in vigorous physical work, and they are expected to play an active role in the affairs of their communities from early in life almost to its end. This latter role changes, of course, with age, but instead of degenerating into retirement spiced with entertainment, people remain socially productive and useful.

Quite obviously, basic being-needs are consistently fulfilled in these societies. Dr. Dubos comments:

> Frugality, continued physical activity, and the practice of engaging in socially useful tasks throughout life certainly contribute to the longevity of these people,

> as well as to their vigor and freedom from disease. Modern societies, in contrast, are moving further and further away from these characteristics, creating a situation in which the young and the old alike are more and more deprived of important social roles.

The reasons commonly given for this deprivation don't seem good enough to Dr. Dubos, since they "cause a wasting of life at both ends and generate dangerous situations for the future." However, he is not hopeful when it comes to proposing a solution. He speaks of the difficulties in the way of "reintegrating young and retired people into a more socially useful life, and says that "our society cannot return to the agrarian ways of life studied by Dr. Alexander Leaf." But if the debilitating effects of our present customs are as bad as he says—and most parents who have had to raise children in an urban or a suburban environment will probably agree that they are—then the goal of natural life deserves more insistent attention.

Meanwhile, there is a strong possibility (of which Dr. Dubos says nothing) that we may be compelled to move in this direction. It is not just a theory but an undeniable fact that the most of mass-produced food is largely dependent on fossil fuels. Ten years from now these fuels will probably be far more expensive, and this will almost certainly stimulate radical changes in the modes of food production—involving, for many, an unavoidable return to a frugal diet and a life of vigorous physical work. And while Dr. Dubos calls for "social innovations to deal with the fact that there is more to human life than health, education, entertainment and leisure," there are already on the scene numerous innovators, most of them young, or youngish, who are experimenting with new and better ways of living on the land. They are trying to collaborate with nature by devising small-scale intermediate technologies to make economical use of existing and renewable sources of energy. This is a mode of life that draws on the competences of even the very young, much as growing up on the farm engaged the energies and interests of the youth of fifty or a hundred years ago.

These are possibilities which speak directly to the problem set by Dr. Dubos:

> There is a painful paradox in the fact that, while young people are now developing faster than they used to, society tends to treat them as dependent children for a longer and longer time. Gone are the days when, in Europe and even more in this country, children were entrusted with chores at home, on the farm, or in the shop and thus had a chance to acquire early, by practice and observation, the confidence and skills of adult life. In theory, teen-agers are now glorified, but in practice they are given little if any opportunity to act as responsible members of the adult community. Whereas in the past many persons in their twenties occupied positions of leadership in all walks of life, people are now regarded as somewhat immature and hence not quite dependable, almost until they have reached their thirties.

Interestingly, a review article in the same issue of the American *Scholar* summarizes the report of a European visitor to American Shaker communities in the 1820s. These ingenuities of the past may represent the sort of practical balance that would go far to correct the mistakes Dr. Dubos finds so demoralizing today:

> . . . he found [the Shakers] selling wooden utensils, sieves, brushes, harnesses, table linen, silver writing pens, and rosewater. Later their *Products of Intelligence and Diligence* (as the Shaker catalog was entitled) came to include baskets, boxes, brooms, knitted garments, blankets, cordage, woollen cloth, fans, straw bonnets, bread, butter, cheese, cream, applesauce packed in buckets of white wood, herbs, sweets chairs, farm equipment, wagons, carriages, and ladies' cloaks. . . . because they all worked, they were quick to appreciate the value of labor-saving devices and to take advantage of the nineteenth-century revolution in mechanical engineering. They were not handicraft cultists, after all but producers of reliable merchandise. They are credited with having invented, among other things, the rotary harrow, the threshing machine, the buzz saw, the pea sheller, the sliding-weight balance, and the common clothespin.

Maybe the time has come for a second time around, Shaker style. We have people like the New Alchemists to show the way on the land, and the inventiveness of the Intermediate Technology experts to help out in the shop. What could be better to look forward to, practically speaking, than a lifetime of productive work? Such goals would surely help to lift education out of the doldrums.

FRONTIERS

Education on Energy

THREE areas of "adult education" seem crucially important to the future of the human race. They might be called the three "E's"—Ecology, Economics, and Energy. While a rapidly growing number of writers are contributing to general education on these subjects, two in particular are especially effective in relation to Ecology and Economics. Howard Odum, who teaches ecology at the University of Florida (Gainesville), has probably done more to change present-day thinking about human use of the resources of the earth than any other contemporary writer. His epoch-making paper, "Energy, Ecology, and Economics," first appeared in *Ambio* in 1973, and was reprinted in the Spring 1974 *CoEvolution Quarterly*, and in *Man-Environment Systems* for 1975. The accelerating changes now going on in economic thinking are very largely owed to E. F. Schumacher, whose *Small Is Beautiful* has been practically a best-seller since it appeared.

What about Energy? It seems likely that Amory Lovins, author of *Nonnuclear Futures* (Ballinger, 1975), will have a role of similar importance in educating the public about energy. Ideal for the general reader is a paper he read at the "Limits to Growth '75" conference held in Texas last October. Besides having the technical knowledge to evaluate alternative possibilities concerning future energy-use, Mr. Lovins shows a profound awareness of the social, psychological, and moral issues involved. In this paper he begins by acquainting his readers with the complexity of the problem. While he cannot transform a difficult subject into an easy one, he at least makes it manageable for serious readers who recognize its importance.

A first conclusion from this paper is that America and the world must find ways of consuming less energy. There can be no escape from this decision. Even continuing with our present rate of energy consumption involves intolerable risks. The writer shows that choices now being made concerning future energy policy may soon prove to be follies on an enormous scale, mainly for the reason that stubborn ignorance is combining with short-term political "necessities" to prevent intelligence from having a voice in national decision.

Mr. Lovins summarizes the evidence indicating strong probability that the climate of the planet will be dangerously altered by continued consumption of energy at the present rate of increase. There may also be atmospheric effects which will be a serious threat to the lungs of human beings. And to these basic considerations must be added the obvious harm of oil spills, soil degradation, strip-mining, water pollution, and deforestation, not to mention seldom thought of disasters such as acid rainfalls. A continuous increase in the number of motor vehicles, with all that this implies, will also result.

Meanwhile the cost of nuclear energy—the cost in money, in inroads on diminishing supplies of fossil fuel, and in risk of lethal pollution—makes support of this alternative the very opposite of intelligent planning. On the basis of present cost calculations of further nuclear development—which Mr. Lovins thinks are over-optimistic—

> . . . the President's nuclear program for the US will require about two thirds of its own output just to maintain its own growth, and probably cannot clear its cumulative energy deficit in this century. In fact, it appears that no large-scale, high technology energy system can provide timely and significant substitution for oil and gas while simultaneously producing substantial amounts of net energy—unless energy demand is meanwhile stabilized or, preferably, reduced.

Even so, the cost factor may not be the most important consideration:

> Both the literature of nuclear experience and analogies with other engineering experience suggest that nuclear safety It not a mere engineering problem that can be solved by sufficient care—though it certainly has unresolved engineering problems in profusion—but rather a new type of problem that can be solved only by infallible people, none of whom is

now observable. This appears to be a new and awkward type of limit to a technology.

Moreover, nuclear systems must be protected not only against malfunctioning machines but also against malfunctioning people. Toxic and explosive materials unavoidably present in the nuclear fuel cycle (for example, a few kilograms of reactor-grade plutonium in any chemical form can be made into a crude but convincing atomic bomb by a talented amateur) offer new and unprecedented opportunities for high-technology violence and coercion, as well as for international proliferation and blackmail of the type cogently described by Robert Heilbroner. On present plans, twenty years from now some 20,000 bombs' worth of strategic material will be in transit annually within the same international community that has consistently failed to halt bank robberies, aircraft hijackings, and the heroin traffic. Careful analysis of present or proposed safeguards against theft of strategic materials suggests that, especially if viewed internationally, the problem is insoluble in principle: the safeguards are bound to be ineffective, repressive, or most likely both.

Readers appalled by the bombing of New York's La-Guardia Airport will have no difficulty in recognizing what Mr. Lovins means. Nor will they disagree with other anticipations:

The civil-liberties implications of nuclear deployment are so disturbing that it is hardly an overstatement to suggest that a large civilian nuclear sector could bring about precisely those political changes which our costly military nuclear deterrent was intended to prevent. As Alfvén remarks, one is forced to envisage "very strict police control of the entire world. . . . "

Amory Lovins has a definite program in mind and believes that a considerable number of Americans are now ready to give it support:

Many policy-makers today consider the most important and difficult questions of energy strategy to be technical and economic. I believe on the contrary that they are mainly social and ethical, and cannot be framed by people whose vision is purely technical. Leaving our descendants irreversible nuclear commitments that we do not know how to handle seems to me ethically unacceptable. So does squandering fossil fuels. . . .

The US, as the country with the most fat in its energy budget, should commit itself to energy stability by about the mid-80's and to substantial energy shrinkage thereafter. With what we now know about energy efficiency, we could without doubt be at least as well-employed and as uncomfortably comfortable as we are now with only about half as much energy. . . . It is long past time to devote our resources and ingenuity to this most cost-effective path. Its social problems are substantial, but seem more tractable than those of a vulnerable and probably coercive high-energy path; a lower-energy path offers opportunities for greater pluralism, for more meaningful social roles, and for reversing the degradation of the social milieu that our acute energitis has produced by mechanizing and fragmenting work.

This change of direction is profound, but I think a concerted effort at both political leadership and grassroots lobbying could accomplish it.

This seems a statesmanlike view for America's collective future in relation to energy. It fits naturally with the individual vision and invention now coming into play in many parts of the country. (Copies of Mr. Lovins' paper may be obtained by writing to him, C/o Friends of the Earth Ltd, 9 Poland Street, London W1V 3DG, UK. It would be well to enclose postage.)