ON REPLACING THE SYSTEM

AN institution is a complex of habits, and in the present the habits impress us as mostly bad. We live in an age dominated by large and complex institutions, kept going by inherited belief, bureaucratic self-interest, and the apparent and actual dependence of people upon their function. With some few exceptions, the focus of investigative journalism and critical sociology is on the follies and inanities, the blindly useless continuities, conceits, and arrogance of these institutions.

The contents of *Harper's* for March make a good illustration. The writers explore institutional delusions in which most of us participate and hold up the consequences for all to see. The first article by Richard Whalen fixes the blame for inflation on our politicians, a responsibility which reverts to the people, who not only "want and demand more than we have produced," but also "intimidate craven politicians to deliver these undeserved rewards through inflation." The fronts of institutional prestige blind us to what is going on, while the learned talk which ignores the realities Mr. Whalen points out keeps us on a course to disaster.

The second article is on the impossibility of what the Bureau of the Census is now attempting—to count and ask everybody in the country a lot of questions about matters that don't really concern the government or anyone else except people with merchandise to sell. Andrew Hacker, the writer, uses only common sense to show that the plan won't and can't work and offers a sensible alternative—rely on sampling or revert to the six original questions that were asked a hundred and ninety years ago—in the first U.S. Census.

The third article is an examination by Michael Mooney of the attempt by the Department of

Justice to prevent the *Progressive* from printing Howard Morland's "The H-Bomb Secret," on grounds of national security. Such matters may not be to the taste of many readers, but the point of Mooney's discussion is that what Morland wrote is not "secret" at all, and can be found in a number of publicly accessible sources. Thus "secrets," officially speaking, are what the Department of Justice says are secrets, even if they have been disclosed in junior high-school texts.

Next comes "Scenes from Corporate Life," a satire on the customs and "psychology" of Big Business, by Earl Shorris, a *Harper's* editor, which reminds you of Kafka's *The Trial*, but is truer to life, you could say, and a lot easier to understand. Barry Lopez writes about what happened when forty-one whales, some of them alive, were stranded on an Oregon beach, and how a number of institutions—learned, civic, and order-keeping—responded, to the common bewilderment and sometimes the shame of a handful of thoughtful witnesses.

William Rodgers recounts the trials of Alger Hiss, reviewing a book and a film about this unfortunate man who now hopes to clear his name of the charge and conviction of perjury. When the writer asked a young educator what he knew about Hiss, the answer was—"some kinda Communist or something." Rodgers says:

For these people, the nonheroes of our time have won: notably Richard Nixon, whose entire political career was taprooted to inflaming domestic fears of a nonexistent American defection nearly to Communism. Then, too, among the more odius victors was the celebrated super-patriot, and patron saint of law enforcement, J. Edgar Hoover, who died peacefully in his sleep in 1971 without ever having to answer for the humiliation, anxiety, violated rights, and deaths he and his agents inflicted on heaven knows how many citizens.

2

There is more. Robert Watson tells how the press handled the murder of five self-styled Communists by a gang of Ku Klux Klanners last November, and how the mourners behaved at the funeral of the victims. The background gathered by the writer provokes embarrassment for us all. The story peels off layer after layer of halfbelieved-in pretense from a palimpsest of journalistic façades.

Unable to distinguish between an authentic political conflict and one that displays violence to attract a following, the media reduced their role to that of convenient stooges, and in their confusion fell back on the stereotype of the Klandominated South to fill up a few minutes on the evening news. The event was not racial or even political, although it did have the fascination of shock and horror. It was, to use an old-fashioned word, evil.

Finally, the *Harper's* editor, Lewis H. Lapham—who, alas, was recently billed in a *Harper's* circulation promotion as " 'eloquent,' 'scandalous,' 'first-rate,' 'powerful,' 'insightful,' 'detestable,' 'tendentious,' 'indulgent,' 'original,' 'idol-smashing,' 'terrific',"—begins his "Easy Chair" essay:

Now that the Presidential campaign has begun in earnest, the candidates who appear in the shop windows of the media must display themselves in a manner appropriate to the season's merchandise. If they wish to court the public's favor, they must conform to the specifications on the label either smiling or grim as befits the station of their image in a society of images. They have as little choice in the matter as a box of cereal or a hat.

And about the same amount of competence and potentialities for intelligent action, Mr. Lapham suggests in the commentary which follows. He is considering, we should remind ourselves, the once hallowed political institutions of the United States.

What, in sum, are all these *Harper's* writers saying? They are saying that the institutions of the country have lost touch with the good of the people. They are proving this up to the hilt. They are also demonstrating the virtual helplessness of those who are supposed to be in charge. The power imagined to exist for those in high places is virtually nonexistent. The people of course are powerless, too, or seem to be, but this may be because they think that power is in the hands of others. Quite evidently, then, we need another level of diagnosis, one higher than that of the *Harper's* writers, who are admittedly brilliant analysts and colorful recorders of the nation's socio-political decay.

How did human good become irrelevant to the management of our affairs? This is the question that needs answering. For diagnostician with a more searching stance we choose John Schaar, who has given much thought to the contradictions in the social processes of our time. In an article of ten years ago ("Reflections on Authority," New American Review, No. 8. January, 1970) he considers the failure of leadership and the breakdown of moral responsibility in the American people, describing the theater of this apparently inevitable decline:

Our familiar ways of thinking prepare us to imagine that a society must have "someone" in charge, that there must be somewhere a center of power and authority. Things just would not work unless someone, somewhere, knew how they worked and was responsible for their working right. That image and experience of authority has almost no meaning today—as the people in power are the first to say. Modern societies have become increasingly like self-regulating machines, whose human tenders are needed only to make minor adjustments demanded by the machine itself. As the whole system grows more and more complex, each individual is able to understand and control less and less of it....

This is what I mean to suggest by the autonomy of process. The system works not because recognizable human authority is in charge, but because its basic ends and its procedural assumptions are taken for granted and programmed into men and machines. Given the basic assumption of growth as the main goal and efficiency as the criterion of performance, human intervention is largely limited to making incremental adjustments, fundamentally of an equilibrating kind. The system is glacially resistant to genuine innovation, for it proceeds by its own momentum, imposes its own demands, and systematically screens out information of all kinds but one.

The basic policy, under such circumstances, can only be one of *drift*, over which the established bureaucracy presides with neither questions nor qualms.

The organization of the human resources needed to serve this process is done in the bureaucratic mode. It would be superfluous here to describe the essential characteristics of bureaucracy; that has been done capably by a number of writers. What I want to do instead is describe briefly what can best be called the bureaucratic epistemology, the operative definition of knowledge or information which is characteristic of all highly developed modern bureaucracies, for this is the screen through which information must pass before it becomes useful knowledge. This screen is one of the basic agencies by which the autonomy of process is assured....

It is misleading to say that bureaucracy . . . is a neutral means that can be used to achieve any end. Here, as in all human affairs, the means profoundly shape the ends. Bureaucracy may have no ultimate values, but it has a host of instrumental values and among these is what counts as knowledge or useful information. This bureaucratic epistemology decisively shapes outcomes-so decisively, in fact, that if you assign a certain task to a bureaucratic agency, you can largely say beforehand how the bureaucratic epistemology will constitute and alter the task itself. To put what follows in a phrase, if you were to assign the task of devising a religion to a bureaucracy, you could say beforehand that the product would be all law and no prophecy, all rule and no revelation.

Prof. Schaar concludes:

Events, institutions, and moral epistemological ideas which, taken together, constitute modernity, have virtually driven humanly meaningful authority and leadership from the field, replacing them with bureaucratic coordination and automatic control processes, supplemented when necessary by ideology and phony charisma. Furthermore, our methods of study have blocked us from seeing that such mechanisms of control are inherently vulnerable and in the long run unworkable, incapable of responding to men's needs for understanding and counsel on the basic, inescapable questions of human existence. So long as men remain what we have hitherto called human they will require of power which strives to

become authority that it respond to those questions in ways that have meaning for men. The current epidemic of revolts and uprisings, the current challenging of established institutions and processes, the thickening atmosphere of resentment and hostility, the drop-out cultures of the young-these are something other than the romantic, reactionary, or nihilistic spasms which they are seen as in some quarters of the academy and the state. They are the cries of people who feel that the processes and powers which control their lives are inhuman and destructive. They are the desperate questionings of people who fear that their institutions and officials have no answers to the questions that matter. They are overt signs of the underlying crisis of legitimacy in the modern state.

A few weeks ago, in "Children . . . and Ourselves," a college professor recalled "the thickening atmosphere of resentment and hostility" which pervaded the attitudes of students in the 1960s, accumulated through anger at the injustices to Southern blacks and the intolerable threat of the draft for the Vietnam war. In brief paragraphs Jerry Richard summarizes ten or twelve years of campus history:

Anti-authoritarianism was the hallmark of the period, and in the drive for equality it was applied indiscriminately, against parents, police, politicians, teachers, works of art, and even against peers who showed any signs of leadership ability. Of course there was good reason to be suspicious of authority: President Johnson had clearly abused his, and if his mendacity was not typical there was still little reason to believe it was any great exception. The road to equality, it seemed, lay through the forest of authority, and so we set about to cut it down....

It wasn't long before there were students demanding office space, and others who wondered out loud why they had to pay while the faculty received pay since not only were we all there together but many of us insisted that for us it was a learning experience too (and it was all too true in some cases). I knew several teachers who shared those thoughts and began to feel guilty about their pay checks....

The symbols that were meant to express the ideas of equalitarianism and living-learning were having another effect. They were degrading education itself. Not just the teacher but what the teacher represented had been leveled; the children and the dogs [brought to class] suggested that

education was not to be taken seriously. Casualness became sloppiness.

Criticism of institutions could go on and onand does go on and on-but little or nothing is said about how to fill the voids which remain when they weaken and no longer function well. There is, after all, a great difference between the sophisticated iconoclasm of the modern critics, so eager to expose and jeer, and the ardor of the institution-makers of two hundred years ago. One might well turn from all this analysis and disillusionment to read, for balance, Catherine Drinker Bowen's Miracle at Philadelphia (Atlantic, 1966), the story of the making of the Constitution of the United States, and then to Hansen's Liberalism and American Allen Education in the Eighteenth Century (Macmillan, 1996), which is filled with the spirit of the institution-making of the Founding Fathers, presenting a detailed account of the plans for a system of national education offered by several of the founders, in response to a competition set by the American Philosophical Society at the end of the revolutionary century. Hansen's book is valuable, not so much for the content of the plans, which is nonetheless of interest, as for the spirit which attended these serious undertakings. The point for attention is the sense of need for institutions of a proper character, and the thinking that went into the plans for a fresh start. In other words, iconoclasts draw on one kind of enthusiasm, builders another.

If all the effective critics of the institutions of our time were herded together and placed on some untouched continent, or even a large island where no man had been, they would soon put away their scalpels and focus on the practical arrangements required to order and secure their lives, their tools, and the common good. Until now they have been engaged in hastening their readers' complete disenchantment with existing institutions—a task that no doubt needed doing but, so transported, they would *have* to exercise a sort of intelligence that seems completely lacking in the present, perhaps because an audience hungering for such synthesizing inquiry seems equally lacking.

Yet the interested people are there, happily unorganized and hard to find, but eager for material that deals with the practical needs of a society which, by reason of the continuing selfawareness of its citizens, will develop and tolerate only institutions which are controlled and used by the people themselves. This means that they would have, as institutions, only a shadowy presence, while their functions would grow or diminish in direct response to the understood needs of the people. There are various examples of such institutions, scattered throughout history, and a lot more examples of socio-economic function in behalf of the common goodcooperative actions which should come before any talk of institutions.

The audience-or constituency-exists, and so do some founding fathers, as well as numerous kin who are showing how to perform the functions of a new and less organized or institutionalized society. The point is that once an individual gets to work at practical innovation, using a new kind of thinking, the whole picture changes. The world, instead of being seen as a collection of poorly operating and unwieldly structures—which we are desperately trying to hold together, and failing more than we succeedturns into a big man-made wilderness in which new paths must be opened and new centers of life There are already clearings where established. this work has been begun.

The really good institutions of the future will probably be formed by not being talked about at all. When a carpenter reaches for an adze or a plane, he doesn't call a meeting to order and discuss the validity of this gesture for a half an hour or so. He just planes the wood. The shop where he can buy a plane or an adze comes into being in response to an obvious need, and that's the way institutions should be born—ad hoc and mortal. We do need people to direct traffic, look after the lakes, rivers, harbors and estuaries, and guard the prairies from overgrazing. One might even say that today we require more institutions than a really good society populated by self-reliant people will need. We are in transition, or trying to get in transition, to humanly scaled patterns of culture in which people do more for themselves and think more for themselves. These are "pioneer" habits we need to get back into, and we find that the system of institutions we have allowed to grow up around us stands in the way. So there are all sorts of disheartening compromises that we can't yet do much about. But it is the general thrust of one's life that counts, not the numerous contradictions that people so easily make fun of, if they have a mind to.

There are a few books that will put readers in touch with the various humanly scaled activities that are already within the capacity of a great many people. They are activities that will generate the right sort of institutions when the time for them comes. The books—or three good ones among them—are:

(1) *Stepping Stones*, edited by Lane de Moll and Gigi Coe (Schocken, 1978, \$7.95), made up of articles and essays by practically all the seminal thinkers of our changing time. The reader will be able to go from this veritable source-book in the direction of his choice, or even be inspired to innovate a direction of his own. The possibilities seem almost infinite, although both imagination and know-how are required. Also persistence.

(2) *Time Running Out* (published in the U.S. by Universe Books, and by Prism Press in England) provides the best of ten years of *Resurgence*, the British magazine to which E. F. Schumacher was a regular contributor. His heart-of-the-matter essay, "Buddhist Economics," which became a chapter in *Small Is Beautiful*, first appeared in *Resurgence* and is in *Time Running Out*, along with several other good things he wrote. Leopold Kohr and John Seymour are well represented, along with a number of British writers who ought to be better known to American readers.

(3) *The Book of the New Alchemists* (Dutton, 1977, \$6.95), edited by Nancy Todd, is filled with the drama of what the New Alchemists are doing on ten acres on Cape Cod "To Restore the Lands, Protect the Seas, and Inform the Earth's Stewards." There a handful of people are working out a cure for a land that has fared ill, which also becomes a cure for confused and pointless lives.

The institutions, if needed, will come later.

REVIEW man and nature

THERE is a sense in which numerous humans of this epoch—enough of them for it to be said that they speak for all-are standing apart from their culture and deciding that the time has come to discover, or rediscover, evolve, and affirm another world view. Why this should be taking place now may be only partly understood, but the fact of moral ferment is plainly evident. One reason for the withdrawal is the cry of outrage from the planet itself, expressed in tones that ecologists understand and interpret. Another is the growing horror of people for the crimes and monstrosities of war, brought to a climax by the use of atomic or nuclear energy to wipe out an entire urban population while infecting the earth with poisons that do not go away. Third is the generalized disgust on the part of many people with their "things"-oriented acquisitive society and the habits and patterns it imposes on nearly all its members.

In other words, *mind* is asserting itself. Mind is variously defined, but its most indisputable quality is devotion to and quest for order. Our world is now increasingly afflicted with disorder, which brings both physical and psychic pain. So our minds have gone to work to understand why, and to seek out the principles of an order providing a better life. One characteristic of a good mind is that it is willing and able to look in all directions. Exactly this is now happening. All the philosophic and religious resources of the past are being revisited by the chastened intelligence of the later years of the twentieth century. Along with the ecological diagnoses we are getting forays into the deeper nature of our ills from writers and scholars who have made themselves familiar with ancient conceptions of nature and Old metaphysical ideas-Greek, human life. Indian, Chinese, Arabic, African, Amerindian-are being revived and fleshed out in sometimes appropriate modern language. Rewarding inspection of the world heritage of myth and symbol is continuous. One could say that if there

is a self-moving, self-creating element in human beings, it is now disclosing its reality to those with some capacity for self-recognition. This amounts to a radical change in the center of gravity of human thought. It is a change gaining numerous interpreters and expressions. If what human beings think about themselves and their meaning shapes human destiny, then this change is indeed the "wave of the future," having the distinctive attribute of conscious determination—a force and cause which hardly any modern historians or sociologists know how to cope with.

The really dramatic event of the present, then, is the spectacle of man redefining himself, and after that, of necessity, everything else.

The manifestoes keep coming, one after the other, from the best minds of the age. An early one was by Lewis Mumford, who wrote in 1930 (in the *Saturday Review*):

Instead of beginning with a portentous sterile physical universe, and finally discovering man, with all his aims and values, as a pathetic, ludicrous byproduct at the end of it, let us begin with the human personality itself. The abstraction of an "independent world" from the ego itself is the result of a long and difficult process which begins in the cradle; and while this abstraction is a genuine aid to growth, the present convention of regarding the human personality as merely an insignificant fragment of that world is quite as false as the infant's original hallucination of creating milk or warmth out of the void merely by We find ourselves, at the very crying for it. beginning of our adventure, in a state of complicated interdependences which unite us not merely economically and spiritually with other men and societies, but to remote parts of the world and to physical conditions which were established long before human forms appeared on earth. Value and significance are the specific marks of human society: hence our task is not merely that of maintaining or reproducing the species, but of enlarging the domain of value and significance.

Mr. Mumford found this the important thing to say by consulting himself and his experience of other humans like himself—the sign and expression of a free mind, confident of locating in itself the knowledge to start out with. A few years later there came from England an orderly and comprehensive manifesto—W. MacNeile Dixon's Gifford Lectures, *The Human Situation* (1937). Dixon, a Platonic and Leibnizian and at the same time very English philosopher, declared:

The astonishing thing about the human being is not so much his intellect and bodily structure, profoundly mysterious as they are. The astonishing and least comprehensible thing about him is his range of vision; his gaze into the infinite distance; his lonely passion for ideas and ideals, far removed from his material surroundings and animal activities, and in no way suggested by them, yet for which such is his affection, he is willing to endure toils and privations, to sacrifice pleasures, to disdain griefs and frustrations, for which, rating them in value above his own life, he will stand till he dies, the profound conviction he entertains that if nothing be worth dying for nothing is worth living for.

The inner truth is that every man is himself a creator, by birth and nature an artist, an architect and fashioner of worlds. If this be madness—and if the universe be the machine some think it, a very ecstasy of madness it most manifestly is—none the less it is the lunacy in which consists the romance of life, in which lies our chief glory and our only hope.

Waxing argumentative in *Civilization and the Arts* (1949), Dixon also wrote:

To strip the human being of all his attributes save his logical or calculating powers is an unwarrantable mutilation. Nature made him what he is. You cannot pick and choose. Nature is asserting herself in him, and you must take account not of one or two but of all her assertions. On every side today you meet with an exaltation of the intellect at the expense of the spirit. You may trust, it is said, your thoughts, but not your aspirations.

With this sword science confidently lays about her today. You see the design. Nature is rent asunder. You enthrone the measuring, weighing, calculating faculty of the human creature. His remaining attributes are irrelevant. But who told you that nature had drawn this line? Where did you learn of this preference? Nature has no preferences. If she has given us deceiving souls, how can you argue that she has given us trustworthy intellects?

The splendor of these ideas is equalled by Dixon's language, a yeast that has been aerating

minds in the West for nearly forty years. Other voices were saying similar things—not the least the voice of Joseph Wood Krutch—and now the dough is rising in intellectual pantries throughout the country, with a few good loaves already available.

Another current of awakening—in this case to what is viable in the past—becomes evident in the work of scholars who have a non-sectarian religious motive, although they often speak from the background of a particular tradition. Seyyed Hossein Nasr, an Islamic writer with a Sufi inspiration, brings the light of ancient metaphysics to bear on the great questions now before the world. Writing in *The Encounter of Man and Nature* (Allen and Unwin, 1968), he calls for recognition of metaphysics as the necessary foundation of an understanding of both ourselves and nature:

The domain of nature has become a "thing" devoid of meaning, and at the same time the void created by the disappearance of this vital aspect of human existence continues to live within the souls of men and to manifest itself in many ways, sometimes violently and desperately. Furthermore, even this type of secularized and urbanized existence is itself threatened, through the very domination of nature that has made it possible, so that the crisis brought about through the encounter of man and nature and the application of the modern sciences of nature to technology has become a matter of common concern.

What does this writer mean by metaphysics?

In the traditions of the East, metaphysics has been continuously alive to this day, and despite differences of foundation there is a unity of doctrine which justifies the use of the term "Oriental Metaphysics," although metaphysics knows no Orient or Occident. In the West there has also been true metaphysics of the highest order, among the Greeks in the Pythagorean-Platonic writings, and especially in Plotinus....

In Western philosophy, however, since Aristotle the unfortunate practice of considering metaphysics as a branch of philosophy came into being so that with the appearance of philosophical doubt metaphysics has also been discredited. . . . In as much as the loss of metaphysical knowledge is

visionary

а

responsible for the loss of harmony between man and nature and of the role of the sciences of nature in the total scheme of things, and by the fact that this knowledge has been nearly forgotten in the West while it has continued to survive in the traditions of the East, it is to these Oriental traditions that one must turn in order to rediscover the metaphysical significance of nature and to revive the metaphysical tradition within Christianity. If the East is learning by impulsion and necessity the Western techniques of domination over nature, it is from Oriental metaphysics that one must learn how to prevent this domination from becoming sheer self-annihilation.

There is no doubt a light on the great questions in metaphysics—the metaphysics taught by the high or wisdom religions of the past, not the speculative abstractions of the West—but the meanings of ancient metaphysics must be lived in order to be made one's own. There need to be frameworks as well as the motive for selfdiscovery. In the last chapter of their new book, *Tomorrow Is Our Permanent Address* (Harper & Row, \$4.95), an account of the bioshelter arks developed by the New Alchemists on Cape Cod what they are, what they mean, what they can be said to promise—John and Nancy Todd say in their last chapter,

"To Begin Again":

Even if the healing of the breach between the human and the natural worlds will take time, there are more immediate rewards in being involved with a bioshelter. One outcome of caring for living things is often a slow integration of faculties that have long been treated as separate. In contrast to the fragmentation, meaninglessness, monotony, and alienation that characterizes so much of modern work, divisions between mind and body, between thinking and doing, become much less apparent, as do the dichotomies of the left and right hemispheres of the brain and those of reason and intuition and of stereotyped sex roles. It is not an unfitting place for mulling over the haunting question posed by Julian Jaynes: "How do these ephemeral existences of our lonely experience fit into the ordered array of nature that somehow surrounds and engulfs this core of knowing?"

One has the feeling that the Todds and their colleagues have begun at the right place—at the

beginning—yet not without destination.

COMMENTARY GOALS AND OBSTACLES

IN the *Christian Science Monitor* for March 25, former Secretary of Agriculture Orville Freeman notes that a billion people now suffer malnutrition due to shortages of food, particularly food grains, and he predicts much worse shortages in the year 2000 unless steps are taken to increase agricultural production. He says that today only half the world's arable land is "currently under the plow," and declares that the earth "has the potential to feed not only six billion people but perhaps as many as 48 billion—or eight times the number of people projected for the year 2000.

Among the measures required for more food production are land reform with supporting services, sensible pricing to encourage small farmers, and "holistic, broadly based community involvement." Standing in the way of such policies, Mr. Freeman indicates, are the "political, social, and economic establishments in the countries which launch such a drive." Another basic obstacle: "Unfortunately, the lead time to accomplish results by way of increased production is longer than the political leadership span of chiefs of state in most countries."

Yet there are countries which have accomplished much in this direction—Japan, Taiwan, and South Korea:

In particular, South Korea and Taiwan are examples of what only a few years ago were underdeveloped, poverty-stricken countries, but where today per capita income has reached \$1,000 annually (compared to \$250 in poorer countries) and where income in the countryside in the agricultural sectors matches that of skilled workers in the cities.

Mr. Freeman wants a "precedent center" established to provide information about both successes and failures in developing farming in small rural communities around the world. Interestingly, in the letter columns of the *Monitor* of the same date a correspondent describes the accomplishment of a social welfare institution in the outlying villages near Solapur, a city of a half

a million in India: "By mere hand labor and common tools, thousands of acres have been redeemed of barren land, resulting in villages taking pride in results obtained without subsidizing by the government."

Wide reading of *Food First* (now in Ballantine paperback, \$2.75), by Lappé and Collins, might stimulate many more such efforts and successes.

CHILDREN ... and Ourselves INSTEAD OF CEREMONIES

IN *Helping your Teen-Age Student* (Dutton, 1979), Marvin Cohn draws attention to an aspect of television programs that may not have been noticed by many parents:

TV producers want to keep us from switching to another channel. To hold our attention they present interesting and enjoyable ideas rapidly and frequently. Therefore, these ideas must be easy to understand. Our attention is directed so quickly from one idea to the next that we can't really think very much about any of them.

One result is that we become passive receivers of information. Children are thus taught that learning is an easy and instantly enjoyable process. They are easily frustrated and lose interest if they have to work hard or get uncomfortable to learn, especially if there is no immediate pleasure in doing it.

The style of TV presentation introduces other problems. There is neither time nor encouragement for the viewer to differentiate between fact, opinion, and fantasy. Vocabulary development suffers because new and difficult words are introduced rarely, nor is there time to figure out the words we don't know.

Stories are presented in thirty- or sixty-minute time slots. To get them done within those rigid time limits, stories are often put together illogically, relying heavily on coincidence and with little regard for reality. This may encourage children to accept uncritically what is offered in the thinking and writing of themselves and others. TV hasn't taught them to look for logic or reality, or anything else that may be hard to understand.

This influence of the man-made environment exists more for the children of the "advanced" societies than for the young where there is less technical development. To make the contrast extreme, the reflections of an African tribal leader—fortunate or unfortunate enough to have had a thorough European education—seem worth recalling here. While Nterenke is a figure in a novel by Richard Llewellyn (*Man in a Mirror*), it is reasonable to think that there have been dozens of thoughtful Africans to whom the same brooding questions have occurred.

In the story by Llewellyn the Masai leader is unable to foresee an understandable future for his people:

Thinking of all the generations of lion-killers while he crossed the plain, Nterenke began to realize with an increasing dismay which he found almost comical that the Masai intellect held not the least notion of physical science, no philosophy, or sense of ideas in the abstract, or any mathematical process higher than the use of the hands and fingers. He amused himself in trying to imagine how he might try to teach Olle Tselene the theory of the spectrum. Yet every tracker knew the value of sunlight in a dewdrop because the prism told where the track led and when it had been made. How the eye saw the colors or why the colors were supposed to exist was never a mystery or problem. They had no place anywhere in thought. But all male Masai, from the time they were Ol Ayoni, had a sharp sense of color from living in the forest and choosing plumage for the cap. Color became a chief need in the weeks of shooting, and comparing, and taking out a smaller for a larger bird, or throwing away a larger for a smaller, more colorful. He wondered where the idea of color began, or why a scholar should interest himself. Mr. James had taught that sound politics led to a rich economy where people earned more money for less hours of work, and so created a condition of leisure needed by inventors, whether mental or physical. The Masai had always enjoyed an ample economy, if it meant a complete filling of simple needs, and after the animals were tended, there was plenty of leisure. Yet there were no inventors of any sort. There was a father-to-son and mouth-to-mouth passing of small items that pretended to history, and a large fund of forest lore that might pass as learning, but there were no scholars, no artists, no craftsmen in the European sense.

The effect was to lock a growing mind in a wide prison of physical action and disciplined restriction that by habit became accepted as absolute liberty.

Was this contrast worth making? Has the forest upbringing of a Masai tribesman any relevance for the problems of what we call education? One might say that the people Nterenke was thinking about at least learned to do *some* things well, whereas the young of our time

too often turn out to be able to do little or nothing very well. Yet there are plenty of young among us who do fine things skillfully in spite of their various exposures to the artificial environment, whether at home or at school, and perhaps these are the ones we should give more attention to, if we can find them and get them to submit to inspection.

They certainly don't get into the statistics on "education." Our analytical tools are sadly wanting in scope. They are like the tests given in great profusion to children, from which we find out, as one observer remarked, which children are good at passing tests.

Education is supposed to enable people to cope with their environment. On this criterion, the Masai had an almost perfect upbringing. But they, along with other Africans, are now exchanging their environment for ours, since apparently they must. This constrains the question: Was their old life, as they lived it from birth to death, any better, or was it worse, than ours? Which makes another question: How are such things measured—in the light, that is, of what ideal?

Such questions are seldom asked, but when they are, and some answers are found, what are the implications for what we call education? The only "study" we know of that relates to such matters is Kenneth Brower's fatherand-son book, *The Starship and the Canoe* (1978), about the physicist Freeman Dyson and his son George. George forged for himself both sorts of education, and it took an enormous amount of doing. He acquired the academic skills, but also learned how to make perfect canoes for use in the waters of British Columbia, and to live in a tree house in that cold but beautiful country.

For George Dyson this was both a transmission and an independent acquisition of skills. But education is also supposed to involve—or was once held to involve—a transmission of *meanings*. We do hardly anything along these lines today. Is this good or bad?

Quite evidently, the more meanings are neglected, the more devotedly we concentrate on the transmission of technique. And now we see that when the idea of meaning is deliberately left out of education, the lowest common denominators of interest fill the vacuum, as in the case of the typical television program.

Again we look at the past, this time through the eyes of Joseph Campbell, who wrote in *The Hero with a Thousand Faces:*

The tribal ceremonies of birth, initiation, marriage, burial, installation, and so forth, serve to translate the individual's life crises and life-deeds into classic, impersonal forms. They disclose him to himself, not as this personality or that, but as the warrior, the bride, the widow, the priest, the chieftain; at the same time rehearsing for the rest of the community the old lesson of the archetypal changes. All participate in the ceremonial according to rank and function. The whole society becomes visible to itself as an imperishable living unit. Generations of individuals pass, like anonymous cells from a living body; but the sustaining, timeless form remains. By an enlargement of vision to embrace this super-individual, each discovers himself enhanced, enriched, supported, and magnified. His role, however unimpressive, is seen to be intrinsic to the beautiful festival-image of man-the image, potential yet necessarily inhibited, within himself.

The temptation to seek a renewal of ceremonials is strong, but those we have available don't work well for us, and a "we know better" feeling is likely to attend the most devout of posturings. The fact is that the modern age is modern in virtue of the fact that those who belong to it can no longer learn from ceremonial, but only from direct encounter. A handful of rather intuitive educators seem to sense this and provide what replacements they can. Recognition of the modern situation makes a good beginning. In this television is no help at all.

FRONTIERS Access to Things Going On

THE Guide to Convivial Tools compiled by Valentina Borremans (of CIDOC, in Cuernavaca, Mexico) is now available, published by R. R. Bowker as a Library Journal Special Report. Convivial tools are tools which have what Ivan Illich (who writes the preface to the *Guide*) calls value"—instruments which make "use for psychological as well as practical independence. It is hard to find lists and bibliographies of works and articles with this focus. Now a splendid beginning has been made to give access to such material, which is continually expanding. Students of intermediate and appropriate technology will find their interests amply covered in the Guide.

In her foreword, Valentina Borremans says: "Each traditional culture has at any particular point in time a unique style of coping with reality, and this style is articulated in its tools." The past, she says, is rich in evidence of the use of tools which had and may still have manifest use-value. "The study of traditional tools which can be improved or changed by new materials, concepts or applications is one of the most important sources of radical technology." (It should be added that the *Guide* supplies full coverage to present developments in this area.)

An entry of particular interest is No. 671 (there are 858 in all), Marshall Sahlins's *Stone Age Economics* (1972), providing quotation:

"The market-industrial institutes system scarcity, in a manner completely unparalleled and to a degree nowhere else approximated. Where production and distribution are arranged through the behavior of prices, and all livelihoods depending on getting and spending, insufficiency of material means becomes the explicit, calculable starting point of all economic activity. Consumption is a double tragedy: what begins in inadequacy will end in deprivation. Within consumer free choice, every acquisition is simultaneously a deprivation." Sahlins points out that the institutionalized hunger of the 1960s is an unprecedented phenomenon, and accumulates evidence that in a typical Stone Age culture a much

smaller percentage of people than today went to bed malnourished and hungry.

As anyone can see from this single example, this collection of sources represents a fresh point of view on ourselves and the way we do things. The *Guide* was born from recognition, during discussion of social questions and issues at CIDOC (Center for Intercultural Documentation), of the need for "the disciplined and welldocumented study of possible alternatives to a society dominated by the industrial mode of production." A look at the *Guide* will show how extensive the literature on such possible alternatives has grown. The vitality of the thinking will also become apparent.

Multiplication of places where such thinking goes on is part of the drama of the present. There is, for example, in Austin, Texas, a Center for Maximum Potential Building Systems (independent non-profit educational and research organization) working to develop small-scale, low-cost appropriate technologies. Practical projects are undertaken, as in the case of the minority, low-income community of Crystal City (Text) which suffered a total shut-off of natural gas in 1977.

The Center helped supply over 3,000 people with their only source of winter heat via wood burning stoves and mesquite wood. We also initiated demonstration low cost hot water heater and solar greenhouse programs coordinated with city-wide materials reclamation, with materials from condemned buildings and other urban sources collected and reused in new collectors and greenhouses.

Another activity:

The Hill Country Youth Ranch in Ingraham, Texas, is a home for abused and neglected children. The Center helped develop the program into a holistic ecological adventure for the children. They will grow their own food, raise animals, experiment with solar and wind energy, and use model water and waste recycling systems. The Center has designed the first main lodge using local caliche for low cost high mass brick and foamed earth exterior insulation for the first time in U.S. The building is heated by a long southern exposure making solar greenhouse corridors throughout. . . . To date comprehensive ecological land planning and mapping have been done on the 120-acre site and caliche brick production has passed the 15,000 mark using a high-output, hand-operated brick machine. . . .

The Center has moved to a new 18-acre farm site on the edge of Austin where we hope to develop an example of an operating living/learning alternative technology community. Plans include solar greenhouses, low-cost solar collectors, earth and passive solar building, solar retrofits on small and typical existing farm structures, water conservation and model waste treatment systems, aquaculture, local energy production from wind and biological sources, and alternative land ownership mechanisms to promote ecologically sound development and affordability. As with our low income community efforts, the intention here is to spawn local and small business efforts as well, to begin to integrate these alternatives with the creation of jobs and economic stability in our own backyard.

The address of the Center is 8604 F.M. 969, Austin, Texas 78724.

Another innovating focus is the Agri-Silviculture Institute founded by Paul Marks in Palm Springs, Calif., devoted to advancing "tree crop agricultural systems suited to marginal and unproductive lands." Involved is the demonstration of methods which could "alleviate food and fuel wood shortages in all continents of the world; and the training and preparation of youth in tree crop careers."

According to a statement in the Institute's Tree Planter/ Communicator (January, 1950):

Agri-Silviculture should not be confused with commercial orcharding. Orchard fruit and nut trees may not be well adapted to the area in which they are grown, and thus require constant attention from man for survival and production. . . . The tree crops that tree crop farmers are developing are not pampered trees.

Once a crop tree reaches near maturity it requires virtually no care from man, which of course makes it ideally suited to the depleted marginal lands where they are needed. In those areas people are often poor and have little means to tend large acreages of orchard trees or grain crops. Right now the Institute is providing communication and test methods for tree farming. (P.O. Box 4166, Palm Springs, Calif. 92263.)

The Institute's purpose is to restore barren land, help feed a hungry world, and prepare youth to carry on this work.