VOLUME XXXIV, NO. 24
JUNE 17, 1981

NOTES ON LANGUAGE

IN his essay in the Winter 1980-81 *Hudson Review,* "Standing by Words," Wendell Berry quotes an interchange between two members of the Nuclear Regulatory Commission concerning the technical breakdown at Three Mile Island, as illustration of the breakdown of language which occurs when engineers try to speak to the public. They don't know how to do it. Their vocabulary is inadequate. The words they are comfortable with have meaning only in a framework which has shut out the simplicities and integrities of morally responsible speech. The problem, as they saw it, was to reassure the public without actually telling lies—to reveal a scary truth without scaring anybody. Their education had afforded no background for meeting a situation like that. After brief quotation from their deliberations among themselves, Berry says:

> What is remarkable, and frightening, about this language is its inability to admit what it is talking about. Because these specialists have routinely eliminated themselves, as such and such representative human beings, from consideration, according to the prescribed "objectivity" of their discipline, they cannot bring themselves to acknowledge to each other, much less to the public, that their problem involves an extreme danger to a lot of people. Their subject, as bearers of a public trust, is this danger, and it can be nothing else. It is a technical problem least of all. And yet when their language approaches the subject, it either diminishes it, or dissolves into confusions of syntax or purpose. . . . the two commissioners, struggling with their obligation to inform the public of the possibility of a disaster, find themselves virtually languageless—without the necessary words and with only the shambles of a syntax. They cannot say what they are talking about. And so their obligation to *inform* becomes a tongue-tied—and therefore surely futile—effort to *reassure.* Public responsibility becomes public relations, apparently, for want of a language adequately responsive to its subject.

In short, when technical matters get out of hand, they become a "management" problem, not a moral problem, in relation to the public. Management is by definition an area of technical expertise, sometimes referred to as human engineering. Today, politicians are increasingly measured by how well they *manage* their campaigns, how they *relate* to the press, how they *deal* with the opposition, rather than what they actually *think* about the world, the people, and what needs to be done. The method, as in the sciences, is the thing. Technique solves all problems.

Our everyday language is a composite shaped by this assumption. Embedded in it are old words inherited from the pre-scientific age—words we dare not give up without being ashamed of ourselves—yet words which no longer have much life in them and which we use less and less. These are words like honor, integrity, truth, duty, faithfulness, courage, and obligation. We no longer think of our world as part of a moral universe, so that such terms have no living reference. Instead, to give our speech vitality, we borrow from the technologists who understand how things work. "Input," for example, is a word borrowed from physical equations. It has the feeling-tone of the "real" world, so we use it in preference to other terms more suited to describe comment or criticism. Years ago a similar expression, "turned on," became almost universally popular. It was—and is—a way of admitting the passivity of the human role. Experience does things to us. We are turned on or turned off. Like a faucet. The image is physical. It is true enough that we are continually affected by the environment, that we delight in some parts of it and are repelled by others, but true human response is not mechanical. What happens, for example, to the idea of "inspiration"

when its operation is described by a plumbing analogy?

The world of transcendence, of ideals, of Platonic perfections, contributes little to our thought and language. Goethe had in mind this loss when he said:

> To treat man as he is, is to debase him;
> To treat man as he ought to be, is to engrace him.

Nietzsche, explaining what he meant by "God is dead!". said in an essay:

> We have abolished the true world. What has remained? The apparent one, perhaps? Oh no! With the true world we have also abolished the apparent one.

This is the metaphysical explanation for all the trouble we are having. The business of humans is not merely to enjoy, to consume, and to exploit; while there is a place in life for enjoyment and consumption, these pleasant activities grow monstrous when there is no pursuit of the ideal—when, indeed, the ideal is no longer a reference. When there is no ideal, the solving of problems becomes entirely a technical fix. The possibility that moral factors play a part in our lives is ruled out as a fantasy of religious superstition; indeed, it is true enough that we do not know how to identify or measure moral causes, since their "input," if any, is incommensurable, having, therefore, to be left out of practical calculations.

No wonder the majestic simplicities of Greek drama are lost on us; no wonder antique, heroic language seems to us stilted and artificial; no wonder our own speech is on the one hand pedestrian, without larger than personal or statistical meanings, and on the other filled with the jargon of imported technical language.

Years ago, in a few words, Erich Kahler gave the background of Greek literature, drama, and therefore of the language. Greek research—primarily philosophy, but also science of a sort—was, he says, "pragmatic in a way utterly different from ours."

> . . . the Greeks wanted to know in order to achieve an orientation in the world, in order to live in the right way; knowledge was closely connected with action, it was indeed a part of action. And living and acting in the right way was not necessarily connected with living *successfully*. It meant acting and living in accordance with the cosmic order. . . . From pre-Socratic to Stoic thinking the quest for the meaning of the cosmic order, which human conduct had to follow, was the prime motive of inquiry.

The philosophic quest—which has, one could say, a religious goal—is for knowledge of the cosmic order. The idea of truth depends for its meaning on the fact or supposition that there *is* a cosmic order, and that knowing or discovering it, while difficult, is possible for humans. Without this assumption, truth has no meaning. In his essay, "Reflections on Authority," John Schaar shows that this idea was once the foundation of the social order, in all its divisions or parts:

> Given the right methods and concepts, increasing knowledge brought increasing harmony between man and the world. In the ages before philosophy and science, myth served this same function of bringing men into contact with the sources of order outside themselves.
>
> Given this concept of truth, social and political life too could be seen as harmonious association of self and society with an objective order external to man and constituted by some force independent of him. Political societies were not works of human art and will, but were embedded in and even constituted by a larger order of being. Human authority rested on bases more "solid" than individual choice and will. . . .
>
> Even the enlightened American Founding Fathers saw the Constitution as a partial embodiment of that higher order called the Laws of Nature and of Nature's God.

But no more.

> No one needs to be told that these ancient patterns of thought no longer prevail. The old moralities of custom and religion are husks and shells. With the growth of the special form of individual self-consciousness as consciousness of separation, men lose sight of the dependence of the group upon morality and of the dependence of morality upon the group. . . . Each man becomes his own boundary setter and truth maker. The ego

recognizes no source of truth and morality external to itself.

Speaking of America, Mr. Schaar says:

> We have no mainstream political or moral teaching that tells men they must remain bound to each other even one step beyond the point where those bonds are a drag and a burden on one's personal desires. Americans have always been dedicated to "getting ahead"; and getting ahead has always meant leaving others behind. Surely a large part of the zealous repression of radical protest in America yesterday and today has its roots in the fact that millions of men who are apparently "insiders" know how vulnerable the system is because they know how ambiguous their own attachments to it are. The slightest moral challenge exposes the fragile foundations of legitimacy in the modern state.

As is generally recognized, a number of counter-tendencies are already developing, at the levels of both theory and practice. Mr. Berry's contribution is one example. He works for a restoration of the past in agriculture, but it is a selective restoration of what was good in the past, before the pressures of systematic acquisition turned the art of growing things into a technique of extraction. There is a natural alliance between those who seek an understanding of the soil and its potentialities and the new pioneers in human community, who reject all the forms of "managerial" enterprise as actual barriers to human growth. Meanwhile, the religious scene is a vast ferment of sensational flag-waving on the one hand, and quietly persistent independent search on the other. There seems a sense in which much of the language of religion in the past must be left behind. A new vocabulary of inward seeking is slowly evolving; it is not systematized, since the sources are too numerous and the language properly tentative, but its strength is undeniable. Many people do not think of this language in religious terms. The new attitudes, apparently eclectic in origin, have a common source in human longing, and meanwhile the wide fields of modern learning and investigation have provided concepts and terms which are rich in analogy with the goals of intuitive wondering. As Henryk Skolimowski remarks in his latest book, *Eco-Philosophy* (Marion Boyars, $6.95):

> The theoretical physicist, Dr. Evan Harris Walker, has said: "It now appears that research under way offers the possibility of establishing the existence of an agency having the properties and characteristics ascribed to the religious concept of God." The universe is again becoming a mysterious, fascinating place. Not only evolutionary biologists, but also astro-physicists have been providing impressive insights and arguments showing that evolution—leading to the evolution of man—has not been a haphazard process. We are not just the result of blind permutations. Evolution has not been the stupid monkey that sits at the typewriter and, given an infinite amount of time, types out Shakespearean tragedies. Evolution has been something else—an exquisite series of compelling and mysterious transformations and transcendences.

Prof. Skolimowski also says:

> One of the great misfortunes of modern Western thought has been the linking of intrinsic values with institutionalized religion. The bankruptcy of one form of institutionalized religion was tantamount, in the eyes of many, to the bankruptcy of religion as such, and of the intrinsic values woven into that religion. This identification was based on faulty logic. Religion, and especially intrinsic values, are not tools of the clergy to keep the masses in order (though occasionally they have been used for that); they are forms and structures, worked out over the millennia of human experience through which the individual can transcend himself and thereby make the most of himself or herself as a human being, through which man's spirituality and humanity can acquire its shape and maintain its vitality, through which we define ourselves as self-transcending beings. As such, intrinsic values outline and define the scope of our humanity.

Professor Skolimowski's book is a study of the movement of modern thought since the time of Plato. For Plato, facts and values were united. This, one could say, is a holistic view. During the Middle Ages, they were still united, but according to the dictates of a Deity whose will was known only to the hierarchy of His priests. This was unacceptable to the rising generation of scientists and the revolutionary spirits, and the result was the radical separation of facts from values; that is,

in the name of the single value of *freedom,* all the other values were classified as speculative, unverifiable, and, indeed, unnecessary to any certainty about the nature of real things in the real universe. Commenting, the author says:

> It is, of course, the empiricist position, or the empiricist tradition . . . that looms largest on our intellectual horizon; this is the tradition that has become our intellectual orthodoxy, the tradition that has been programmed into our ways of thinking and judging, the tradition that has brought the value-vacuum to our society, to our universities, to our individual lives.

His book is in its way a foreword to recognition of the great change that is now proceeding, based on countless new springs of awareness that human beings cannot go on living as they do, thinking as they do, being managed as they are, by a technocratic elite. As Berry says in *The Unsettling of America:*

> . . . it is clear to anyone who looks carefully at any crowd that we are wasting our bodies exactly as we are wasting our land. Our bodies are fat, weak, joyless, sickly, ugly, the virtual prey of the manufacturers of medicine and cosmetics. Our bodies have become marginal; they are growing useless like our "marginal" land because we have less and less use for them. After the games and idle flourishes of modern youth, we use them only as shipping cartons to transport our brains and our few employable muscles back and forth to work.
>
> As for our spirits, they seem more and more to comfort themselves by buying things. No longer in need of the exalted drama of grief and joy, they feed now on little shocks of greed, scandal, and violence. For many of the churchly, the life of the spirit is reduced to a dull preoccupation with getting to Heaven. At best, the world is no more than an embarrassment and a trial to the spirit, which is otherwise radically separated from it. The true lover of God must not be burdened with any care or respect for His works. While the body goes about its business of destroying the earth, the soul is supposed to lie back and wait for Sunday, keeping itself free of earthly contaminants. While the body exploits other bodies, the soul stands aloof, free from sin, crying to the gawking bystanders: "I am not enjoying it!" As far as this sort of "religion" is concerned, the body is no more than the lusterless container of the soul, a mere "package," that will nevertheless light up in eternity, forever cool and shiny as a neon cross. This separation of the soul from the body and from the world is no disease of the fringe, no aberration, but a fracture that runs through the mentality of institutional religion like a geologic fault. And this rift in the mentality of religion continues to characterize the modern mind, no matter how secular or worldly it becomes.

This is the real reason why people are beginning to invent their own religion, while looking to those aspects of the past—in old philosophers, old communities, old ways of doing things—which are in harmony with their present longings.

It should not be thought, however, that the epoch of science and the disciplines of scientific inquiry have had no part in this awakening. The independence of modern inquirers, who combine a natural reverence with determination to penetrate both the ways of nature and the ways of self, owes much to the scientific spirit. The web of specialization which at once constitutes the genius and caused the narrowing isolation of the modern mind is also the source of a wide range of subtle distinctions. Through science men have learned to be careful observers, precise describers, and imaginative theorists—qualities as necessary to the religious as to the scientific life. Religion was once a rigorous discipline in the days of Plotinus, and millennia before that in the East. The recovery of this spirit for the West may eventually be seen as the living contribution of science to our own time. Eventually, with the help of scientists like A. H. Maslow, we should be able to evolve a language equal to our obligations and needs.

REVIEW
SO MUCH TO UNDO

THE quiet, not continuously proclaimed thesis underlying the books of Ivan Illich is that human beings are by nature capable of doing what they need to do, while education, for the most part, has been intent on reducing and even destroying that capacity. He doesn't say much about the positive values of formal teaching—whatever they are—but concentrates on the abuses of institutional authority and influence, making almost yearly reports on their increase and elaboration. His latest book, *Shadow Work* (Marion Boyars, 99 Main Street, Salem, New Hampshire 03079, $5.95), is essentially concerned with the loss of human capacity for self-reliant subsistence and with the growth of institutions and unavoidable patterns of behavior which make it almost impossible for us to recover the ability to take care of ourselves—outside, that is, of the niches and roles prescribed for people by the technological society.

While Illich's generalizations are abstractly lucid, his categories are always "new," so that he must be read two or three times to grasp his meaning. The terms of his analysis need effort to be understood, but the effort is worth making by reason of the freshness of perception which results. This perception is almost always critical, however. He seems to have a tender, but almost secret regard for the ordinary folk in behalf of whom he writes, as though they should not be talked about too much, except as victims. Perhaps, some day, he will write about them as the salt of the earth, having native capacity to give form and substance to a society which is neither humdrum and dull nor dramatically "ideal," but simply functional to the purpose for which souls with both moral and practical intelligence are born on earth. One would like to know a little more of what he thinks about this. (Illich, however, might suggest a reading of the second chapter of his *Tools for Conviviality* (Harper, 1973) for an answer to such questions.)

Meanwhile, his books are helping to clear away the rubbish of misconception and presumption. He applies the scientific method to the delusions so produced. He piles up evidence to show that science has supplied the engineering skill facilitating human self-defeat. He does this sector by sector, layer by layer.

Where, in the history of the West, did the demoralization begin? In a chapter in *Shadow Work* called "The War Against Subsistence," he says:

> The idea that humans are born in such fashion that they need institutional service from professional agents in order to reach that humanity for which by birth all people are destined can be traced down to Carolingian times. It was then that, for the first time in history, it was discovered that there are certain basic needs, needs that are universal to mankind and that cry out for satisfaction in a standard fashion that cannot be met in a vernacular [uninstitutionalized] way. . . . from the eighth century on, the classical priest rooted in Roman and Hellenistic models began to be transmogrified into the precursor of the service professional: the teacher, social worker, or educator. Church ministers began to cater to the personal needs of parishioners and to equip themselves with a sacramental and pastoral theology that defined and established these needs for their regular service. The institutionally defined care of the individual, the family, the village community, acquires unprecedented prominence. The term "holy mother the church" ceases almost totally to mean the actual assembly of the faithful whose love, under the impulse of the Holy Spirit, engenders new life in the very act of meeting. The term *mother* henceforth refers to an invisible, mystical reality from which alone those services absolutely necessary for salvation can be obtained. Henceforth, access to the good graces of this mother on whom universally necessary salvation depends is entirely controlled by a hierarchy of ordained males. . . . From the ninth to the eleventh century, the idea took shape that there are some needs common to all human beings that can be satisfied only through service from professional agents. Thus the definition of needs in terms of professionally defined commodities in the service sector precedes by a millennium the industrial production of universally needed basic goods.

This is Illich, not Martin Luther, speaking. Interestingly, he remarks that, many years ago, he

came across this idea in something by Lewis Mumford, but considered it only an "intuition." Then, from his studies, he found "a host of converging arguments—most of which Mumford does not seem to suspect—for rooting the ideologies of the industrial age in the earlier Carolingian Renaissance."

A summarizing passage on the impact of this inheritance comes in the section of Notes and Bibliographies:

> The modern age can be understood as that of an unrelenting 500-year war waged to destroy the environmental conditions for subsistence and to replace them by commodities produced within the framework of the new nation state. In this war against popular cultures and their framework, the State was at first assisted by the clergies of the various churches, and later by the professionals and their institutional procedures. During this war, popular cultures and vernacular domains—areas of subsistence—were devastated on all levels. Modern history, from the point of view of the losers in this war, still remains to be written.

Needless to say, chapters in this history are what Illich contributes. He does not write as a rabble-rouser, eager to stir the masses to revolt, but as an incisive critic who addresses the "clerks" who need to recognize and cease from their treason. He exhibits the consequences of their faithfulness to the rules, if not to the ruling intentions, of the institutions of the time.

On his first page he borrows from economics some terms to assist his analysis. "External costs" are those which don't get into the formal accounting. "Internal costs" do. He speaks, first, of the goals of "development" as conceived a few years ago, and why they are now being challenged:

> The immediate goal of . . . social engineering was the installation of a balanced set of equipment in a society not yet so instrumented: the building of more schools, more modern hospitals, more extensive highways, new factories, power grids, together with the trained to staff and need them.
>
> Today, the moral imperative of ten years ago appears naive; today, few critical thinkers would take such an instrumentalist view of the desirable society. Two reasons have changed many minds: first, undesired externalities exceed benefits—the tax burden of the schools and hospitals is more than any economy can support; the ghost towns produced by highways impoverish the urban and rural landscape. Plastic buckets from Sao Paulo are lighter and cheaper than those made of scrap by the local tinsmith in Western Brazii. But first cheap plastic puts the tinsmith out of existence, and then fumes of plastic leave a special trace on the environment—a new kind of ghost. The destruction of age-old competence as well as these poisons are inevitable byproducts and will resist all exorcisms for a long time. Cemeteries for industrial waste simply cost too much, more than the buckets are worth. In economic jargon, the "external costs" exceed not only the profit made from plastic bucket production, but also the very salaries paid in the manufacturing process.

Meanwhile, the imposing structures of "development" give visible support to the idea that the requirements of Progress leave no alternative and that people must learn to adjust. Persons who know how and are able to walk must now ride. People once well equipped to make things must now buy them instead. Their lives are endlessly complicated by technological pseudo-simplicities which have been turned into necessities. Illich continues:

> These *rising externalities,* however, are only one side of the bill which development has exacted. *Counterproductivity is its reverse side.* Externalities represent costs that are "outside" the price paid by the consumer—costs that he, or others of future generations will at some point be charged. Counterproductivity, however, is a new kind of disappointment which arises "within" the very use of the good purchased. This internal counterproductivity, an inevitable component of modern institutions, has become the constant frustration of the poorer majority of each institution's clients: intensely experienced but rarely defined.

What does he mean by this?

> For most people, schooling twists genetic differences into certified degradation; the medicalization of health increases demand for services far beyond the possible and the useful, and undermines that organic coping ability which commonsense calls health; transportation, for the great majority bound to the rush hour, increases the

> time spent in servitude to traffic, reducing both freely chosen mobility and mutual access. . . . This institutionalized frustration, resulting from creation of a population compulsory consumption, combined with new externalities totally discredit the description of the desirable society in terms of installed production capacity. As a result, slowly, the full impact of industrialization on the environment becomes visible: while only some forms of growth threaten the biosphere, all economic growth threatens the "commons." All economic growth inevitably degrades the utilization value of the environment.

Illich is not of course against the development of better tools and the means of noncoercive arrangements for the common good. The growth he condemns is growth which by its nature reduces both the capacities and the opportunities of the individual for self-development and self-reliance.

"Shadow Work," which gives the book its title, means work that is not paid for, yet exacted from those who live in a technological society—housework, mainly, but also "the activities connected with shopping, most of the homework of students cramming for exams, the toil expended commuting to and from the job." As a further burden there is "the stress of forced consumption, the tedious and regimented surrender to therapists, compliance with bureaucrats, the preparation for work to which one is compelled, and many of the activities usually labelled 'family life'."

What is Illich's conception of a good society—called "a subsistence-oriented way of life"? He says:

> There, the inversion of development, the replacement of consumer goods by personal action, of industrial tools by convivial tools is the goal. There, both wage labor and shadow work will decline since their product, goods or services is valued primarily over the record, the library over the schoolroom, the backyard garden over the supermarket selection. There the personal control of each worker over his means of production determines the small horizon of each enterprise, a horizon which is a necessary condition for social production and the unfolding of each worker's individuality.

This is an ideal toward which some are already working. Illich speaks of them briefly, but without excess of enthusiasm. There is so much to do—and undo.

COMMENTARY
WHAT'S WRONG WITH ADAM SMITH?

THE archetypal culprit and target for the charges of economic reformers is Adam Smith, ideological hero of modern capitalism, who in 1776 published *The Wealth of Nations,* the book which gave both moral justification and pragmatic sanction to private enterprise. If, however, you pick up the book and read a little in it, you begin to wonder how such a well-intentioned man could do so much wrong; and then you might come across a moderate defense through quotation of some of Smith's comments and proposals, in an essay by a respected humanist like Robert M. Hutchins, or in an excellent text such as *The Challenge of Humanistic Economics* by Lutz and Lux.

Now a contributor to the *Nation* for May 16, John L. Hess, has gone the whole way in behalf of Adam Smith. The catch-line in the title of this article is "What He Really Said," and the twelve extracts given from Smith's book, as keynotes of his thinking, go far to prove that the author of *The Wealth of Nations* was by no means the champion of ruthlessly selfish acquisition, but rather, as Hess maintains, "a radical humanist philosopher of the Enlightenment." This seems a fair estimate of the man who said: "All for ourselves and nothing for other people, seems, in every age of the world, to have been the vile maxim of the masters of mankind." Hess writes:

> Adam Smith despised aristocrats, mistrusted capitalists and wept for the laboring poor. . . . Now, it is true that Adam Smith preached the productive genius of small, private enterprise operating in a free market. But where the right today hails greed as a virtue, he saw it as a sort of original sin that made landlords and businessmen the inveterate enemies of the free market: "People of the same trade seldom meet together, even for merriment or diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."

Was there *nothing* wrong with Adam Smith's ideas and intentions?

Not so far as John Hess will say. Yet the real issue may be simply that Smith seems to set all important problems in economic terms. In his case, Marshall McLuhan's rule, "The medium is the message," has exact application. He led people to think that the economic system is about the most important thing in the world. This may be the only really needed criticism of Adam Smith.

CHILDREN
. . . and Ourselves
STORY VERSUS THEORY

AN episode—undramatic on the surface—in the continuous effort by Christian fundamentalists to get "creation theory" back into public school science classes "in some form" was reported in the *Los Angeles Times* of March 6. Kelly Segraves, of the Creation Science Research Center (San Diego, Calif.), objected in a legal action to a sentence in a text used in the California schools because it "presents evolution as a fact." He maintained in his suit that the practice of the State Board of Education "to make Darwin's theories the sole basis for teaching biology in California public schools violates his children's freedom guaranteed under the First Amendment."

The offending sentence (in *Principles of Science,* issued by a school to Segraves' son, Kasey) is: "The process [evolution] has been going on for so long that it has produced all the groups and kinds of plants now living as well as others that have become extinct."

The trial was held in the Superior Court in Sacramento (the state capital) before Judge Irving Perluss. After Segraves' charge against the Board of Education was made clear, the judge said that it seemed to be no more than "a matter of semantics," and not an important constitutional issue. Since other parts of the book state that evolution is a theory which leaves some questions unanswered, the case was settled through agreement that public school teachers and texts would continue to teach evolution as a "theory."

The background of this action is of general interest. The *Times* report says:

> In recent years, the Creation Science Research Center and other conservative Christian groups have pressed for legislation permitting the teaching of creationism in about two dozen states. Missouri has already acted to permit teachers to acknowledge that evolution is a theory, not proven fact.
>
> Despite Segraves' disclaimer that the case is only one of "religious freedom," further qualifying of evolution as a hypothesis could open the way for creationist groups—especially in an opportune conservative political climate—to declare that the biblical account of creation should also be taught in the public schools.

These efforts have already begun. According to the *Times* summary:

> —Bills that would give biblical creationism equal classroom time have been introduced in 13 state legislatures.
>
> —Hundreds of school board meetings have been attended by thousands of parents who are worried about the loss of traditional values and who favor creationist teaching.
>
> —State boards of education have been lobbied to include creationist texts on their list of approved textbooks.

The long-term goal of the action brought by Segraves is said to be similar:

> Nell Segraves, founder of Creation Science Research Center and mother of plaintiff Kelly Segraves, was outspoken about the Sacramento suit being only the beginning of an effort to roll back the decades-long evolution in classroom biology teaching.
>
> "We want the authority and endorsement of the state removed from evolutionary theory," she told reporters in the courtroom hallway. "Whatever they give us, that will be the source of our next step. We can't begin to get scientific creationism into the schools until this step is taken." She added that if a qualifying statement is introduced into the science framework, "then evolution will be considered just another philosophy."

One of her contentions is that "If man is taught he is descended from animals, he will behave like an animal." Parents who are not fundamentalists and not even Christians may share this view, while not accepting the Garden of Eden story.

Teachers and educators who testified at the trial said that evolution theory is based upon a vast amount of evidence, that it is not taught dogmatically, and that it would be difficult to teach biology if evolution were left out. One high

school teacher, John Horn, said that teachers make no attempt to tell students to "believe" in evolution, and that he teaches "what biologists have built as a model." A Caltech professor of biochemistry said: "I know of no scientist who wouldn't jettison the theory of evolution if a better theory came along."

While the contention of the plaintiff in this action—that evolution is identified in a textbook as a "process" instead of a theory about a process—may seem a quibble about words, the enduring issue between the biologists and the "creationists" is the question of man's origin, for many determining his nature. What Henry Anderson called the "naked ape" books (in a MANAS article some years ago) might be cited to confirm that humans are likely to behave like animals if they believe they are descended from animals. There is value, then, in pointing out that when this question reaches the courts as public forums, it is always argued as though only two possibilities exist—the Darwinian explanation versus the Garden of Eden story. The argument, in short, is turned into a *political* issue, which means that, eventually, not evidence or truth, but the pressure of *numbers* will decide.

What seems far more important than the inevitably imperfect content of education is the spirit and temper of the teachers, which of course cannot be altered by legislation.

In *Evolution and Religion,* published by Scribner's in 1926, Henry Fairfield Osborn quoted from a January 1925 newspaper: "The lower house of the Tennessee General Assembly, voting 71 to 5, passed a bill prohibiting the teaching of evolution in the common schools." Commenting, the eminent anthropologist said:

> The actual effect of this bill is the declaration by the legislature of one of our oldest and finest States that the Truth must not be taught in the schools of the State. Since 500 B.C. such legislation has repeatedly come from ecclesiastical assemblies and from inquisitorial chambers but never before in the history of mankind from a legislative assembly such as that of the State of Tennessee. That such an inquisition should arise in the United States is almost incredible, that teachers in the schools of Tennessee should be compelled to deny the truths taught by nature or lose their means of livelihood puts the State back exactly four centuries to the inquisitorial period of Spanish history.

The *Los Angeles Times* writer recalled the Scopes trial in Dayton, Tennessee, in 1925, since the Segraves suit against the California Board of Education seemed similar:

> For 12 hot days in July, Darrow defended Scopes and pressed Darwin's theories. Bryan, a three-time presidential candidate and the most famous orator of his day, argued for the state, extolling the account of creation found in the book of Genesis, which holds that a Supreme Being created the world in six days. Scopes lost the criminal trial and was fined $100, which was paid by *Baltimore Sun* newspaper reporter H. L. Mencken, one of the 150 members of the press covering the event. . . . Although William Jennings Bryan won his case against Scopes in 1925, the Fundamentalists' drive to establish anti-evolutionist laws in other states was irreversibly harmed by public reaction to the trial.

Today, because the issue has again been politicalized by fundamentalist spokesmen, there seems little hope of intelligent reconciliation. The appropriate recourse, for objecting parents, might well be that chosen a few years ago by the Wisconsin Amish, who went to the Supreme Court to win the right, on religious and first amendment grounds, to withdraw their children from public school to protect them from what they regarded as the morally corrupting effects of an acquisitive society, reflected in the schools.

Finally, it should be pointed out that religions other than Christianity have conceptions of moral and spiritual evolution at the foundation of their teaching—Buddhism and Hinduism, for example. Limiting the possibilities of human origins and development to a choice between Darwin and literal belief in the Genesis myth seems an impovershing restriction.

FRONTIERS
Consider India...

You can find whatever you are looking for in India. But you cannot miss the people. India has three times the population of the United States in an area one third the size. Urban streets throng with people going somewhere for some purpose. All day traffic is like rush hour in an American city. Add to this scene several hundred thousand people who eat and sleep on the streets. If you stay in the large cities, it is easy to forget that India is an agricultural country. The population approaches 700 million, but only 20 per cent of the people live in the cities. Eighty per cent live in rural areas. Even the rural areas are crowded. As you travel you are seldom out of sight of small clusters of mud-brick dwellings or somewhat larger villages. The country roads, some paved, some not, flow with people moving by foot, bicycle, bullock cart, and sometimes a dusty red bus. Herds of imperturbable cattle and friendly goats pre-empt the road from time to time. Paths lead away to unseen villages and farms where most of the Indians have lived for centuries. Nevertheless there is land yet to be irrigated and cultivated.

You cannot miss the poverty. More people are living in miserable circumstances in both city and village than the entire population of the United States. Gandhi's emphasis on suffering has sometimes led people to think that Indians don't really mind being miserable or that they make a virtue out of it. This dreadful mistake can be straightened out by distinguishing between *voluntary* suffering and *involuntary* suffering. Gandhi made this distinction very clearly. From start to finish in his long career he endeavored in many ways to remove involuntary suffering and improve the material well-being of Indian villagers. Satyagraha, as a method of social reform, involves voluntary suffering, but always as a means, never as an end in itself. In opposing greed and affluence, Gandhi is not advocating complacency with respect to basic human needs.

Increased production of material goods is a high priority in India. Poverty is an acknowledged evil about which something must be done. No one denies this. The debatable questions are: What products, what methods of production, and how distributed? The moral imperative to attack poverty rises out of the appalling facts. It confronts the inertia of tradition.

Rather than dwell on the extent of poverty in India, consider another part of the picture. The worst figure you can get for poverty is 60 per cent of the people. The official government figure is considerably lower, about 40 per cent. Take the worst figure, 60 per cent. This still leaves 40 per cent of the people living above the poverty level, and of course many of these are living considerably above it. Forty per cent of 700 million people is 280 million. Just to be cautious, cut this figure by 30 million (more people than live in the state of California), and you realize, perhaps with a bit of shock, that at least 250 million Indians are doing reasonably well by appropriate standards. This, is *more than the entire population of the United States!* They are healthy, happy, and productive.

One can hope that this is the India of the future, that slowly the ratio between misery and well-being will shift, and India will become a country of happy productive people whose material level of life is adequate if not affluent and whose personal and social policies reflect an ecologically sound recognition of what is enough.

This hope may be shattered by forthcoming events—who knows?—but it is grounded in the hundreds of millions of Indians who seem already in tune with the requirements of human dignity and survival on this increasingly crowded planet.

You see health and vitality in their faces. You see productivity in cities and villages. In the cities, countless small shops line the streets. You peer inside and people are making anything from clothes to electric motors. You see factories large and small. In the country you see small farms and vegetable gardens, bananas, sugar cane, oranges,

and cotton; and all manner of small-scale marketing of local produce. You see construction of roads, sewers, and irrigation systems. You see goods being transported by train, truck, bullock cart, and head basket. There is always someone to help hoist the heavy basket to the head of the carrier.

Wardha District, where Sevagram is located, is one of the more progressive rural areas. There, inspired by Gandhi, vigorous research and educational institutions carry on various aspects of the constructive program he felt so necessary for the well-being of Indians and India. Young Indians are learning math, physics, chemistry, biology, processing of grain, cereal, and pulses; they are developing appropriate technologies for villages; they are studying languages and business administration. Vinoba Bhave, whose Ashram is in nearby Paunar, continues his advocacy of both science and "spirituality" and urges maximum utilization of solar energy. The government pays attention to his views, and the newspapers report them. There is a small bio-mass gas production unit at the Sevagram Ashram. At the same time the local farmers resist adopting composting as a means of improving crops.

The Integrated Rural Development Programme of the Central Government aims each year to provide economic assistance to 600 "poorest of the poor" families in each of 5004 "development blocks," thus helping three million families per year. This project, adopted in October 1980, is still more plan than achievement, and even if successfully implemented over a six-year period would still leave many families in distress.

Although poverty is a terrible fact in India, the progressive elements are there, too. It is a matter of assessing their strength and durability. They need time to take hold and spread.

Population continues to grow. Coercive measures of population control have been abandoned in favor of voluntary programs of education and family planning. The *rate* of population increase is decreasing, but the population curve cannot be expected to level off during the present century. There is no over-night solution and no long-run solution without continued misery for many people for many years. At present the problems engendered by population growth may be outrunning the programs intended to help.

India needs time, maybe centuries, to cope with population and poverty. During this time hundreds of millions of people will continue to live and die in miserable circumstances, too sick and ignorant to rise up in protest. Others, aided by increasing numbers of concerned citizens, may become active in pursuit of higher wages, better housing, and a variety of social services. Part of Gandhi's genius was to enable ordinary people to find the strength and courage to do things they did not think they were capable of. It could happen again, though no such leader is presently in sight. *Satyagrata* is a familiar term.

A politically astute Indian historian said that if Gandhi had lived for five more years India's direction as a nation might have been effectively decided. That is high praise for Gandhi's capacity to influence history. Surely another five years of Gandhi's leadership would have helped in several ways—more emphasis on preservation and revitalization of village life, more self-sufficiency with respect to food, shelter, clothing, more concern for non-violence as a life style. But it is hard to believe that Gandhi's presence would have stemmed the population explosion. This same historian said that Gandhi was by no means exhausted in 1947, but everyone else was!

India is a peaceful nation. Indian newspapers daily report crimes of violence, just as ours, though not so many. The difference is that they are reported with a sense of outrage which is quite in contrast with the voyeurism that pervades our journalistic handling of violence. A man from Calcutta said, "It is all greed and lust and power now in India." He overstated his point. There is also the tradition of non-violence, negotiation,

patience, and persistence. Whatever qualifications you wish to place on the achievement, every Indian knows that India dismissed the mighty British Empire without killing her representatives. No one fears that India will play the role of aggressor on the international scene. In this sense, India is a peaceful nation with neither the present capability nor the desire to develop a military establishment remotely comparable to ours. Not as peaceful as the Gandhians would like nor as strong as Nehru's daughter wants, but not a threatening actor on the international landscape.

Thirty-four years of independence are not enough for India to come out from under the grinding, dehumanizing exploitation of 300 years of British rule. The economic and psychic wounds of British imperialism heal slowly as India seeks an identity for the 21st century. Fair comparisons are hard to make, but it may be noted that the American colonies freed themselves from these same British after 150 years of control, and subsequent development was disrupted by a disastrous civil war that came ninety years later. After 150 years Franklin Roosevelt was obliged to declare one third of the nation ill-clothed, ill-housed, and ill-fed. After 200 years, with Viet Nam now on our conscience, we are still groping our way toward responsible nationhood that is compatible with international peace. Surely it is understandable that India needs a century or two to cope with problems far more desperate than we have been obliged to face.

Keep in mind those 250 million productive Indians upon whose efforts India's future depends. Gandhi's leadership and India's performance are woven with perplexities and limitations. But Gandhi as a person and India as a nation signal that there are heights of achievement and reservoirs of endurance and creativity that we deny at our peril and devalue only by our lack of sensitivity.

Portland, Oregon DAVID H. NEWHALL