HUMAN COMPLEXITY

HUMAN beings have two sides. No doubt they have many sides, but considering them as twosided is likely to give more light on human They want, for example, to have answers, to settle things so that they need no more attention; but then, after a time, they grow bored with a settled state of affairs and look for something else to do. In one of his rather wonderful stories Don Marquis told about a man who died and went to "heaven." There, he found, everything was just as he wanted it. He lived in a place that fulfilled his dreams and anything that seemed missing his faithful attendant immediately produced. After a time—actually only a few months—the setting palled and he told the attendant how he felt. The heavenly servitor suggested that he do the house over in medieval style—"heavy furniture you can put your feet on without worrying about it, and stately stone walls with high ceilings." The man mused and then said, "Well, I'll probably get tired of that too. You know, there are times when I almost wish I was in Hell." The angelic presence quietly replied: "And where do you think you are, sir?"

We hunger, in short, for answers, but then we may decide that questions are better than answers. Yet the hunger is insistent and we develop the scientific method to get answers. We get them, but soon—or late—we discover that the trouble with an answer is that it has only limited application. And then some mathematician—one of the managers or proprietors of scientific method—works out a proof that, always, some of the axioms of a closed system are secretly unstable, causing the system to break down. The equations are no longer dependable; new or better axioms are needed to keep the system going. Then, usually, we get them. An Einstein adds to a Newton, and the resulting arrangement, the

experts say, now works for matters Newton's system couldn't explain or deal with.

Where did the scientists get the new axioms? Out of themselves, the mathematicians tell us. But even the new axioms won't last forever. They may work for a hundred years or so, but eventually they break down. Then the scientists—those whom we call the *creative* scientists—get busy and do the necessary patch job, which lasts for a time. Nature, you could say, is like us; eternally it gives answers and then raises questions. The rule that applies is known as Gödel's Theorem, which can be looked up.

A while back (June 26) we had an article on storytelling. The point was that the good storyteller leaves you with a question to think about. A story that ends in finality consumes itself. We want a tomorrow and a finality has no tomorrow. Nothing is left to do. What could be worse than having nothing to do?

At a more elevated level of inquiry, we are drawn to thoughts of immortality because of the prospect of more things to do. Dying, we say to ourselves, cannot be the end, the absolute end. Somehow, we must go on. Yet we may be very tired, ready for eternal rest, for the peace of virtual nonentity. We may feel like the exhausted old English cleaning woman, who had etched on her gravestone,

Now don't you be grieving Or weep for me ever, For I'm going to do nothink Forever and ever,

but the time will come when a mop and a pail of dirty water will seem like accourrements of paradise! We'll want to get to work.

The human quest for engagement seems good evidence of this. From its earliest years, the child is alert for new experience, looking for things to do. Delight comes easily to the young child; the world seems filled with novelty, with objects to be seen, touched, and handled, absorbed into the child's life, manipulated and made familiar. Then the time comes when the familiar is taken for granted, when it seems a stable part of one's being, reliably there but no longer of great interest. The new claims attention, and is to be understood and controlled by being related to the structures of awareness that we have already established.

So it is throughout life. We call this process of assimilating the new to the old, making ourselves "at home" in the world. It is also called "learning" and there can be no end to it since the world is such a big place.

Here, too, humans are two-sided. There is the part of us which relates to the world, to other people and objects, with our requirements, wants, desires, and needs, leading to the development of structures of knowledge about the world—how the things in it work and what must be done to make them serve us. We name this knowledge science; we acquire some of this knowledge for ourselves-what we use from day to day-but eventually, as it becomes complicated and difficult, we delegate the gathering of scientific knowledge to individuals who have a particular talent for the rules governing finite things. These specialists develop impressive powers over matter and its motions, and we honor them by putting them in charge of our schools and universities.

Their task, we believe, is to instruct the young in the techniques of getting what we need Occasionally, when a scientist and want. presumes to be able to tell us what we ought to do, instead of just how to do what we want, we demote or punish him, as in the case of J Robert Oppenheimer, the nuclear physicist supervised the construction of the atom bomb that incinerated Hiroshima. He later opposed construction of the H-Bomb, with the result that he was no longer allowed to serve his country as a member of the Atomic Energy Commission, doubts having been cast on his "loyalty." What had he done? He had allowed a "moral" conception of human behavior to intrude in his scientific thinking. He thought that the advance in destructive power of the H-Bomb would be *wrong*.

This introduces the other side of human beings—how we think about ourselves—what we have to say about the meaning of our lives. We are continually making choices affected by what we think is desirable or undesirable, good or bad, more rarely by what is right or wrong. How do we make up our minds about such things? Here the scientists, as scientists, seem of little or no help. As human beings, when their inner side comes into play, they may have strong convictions, but as technicians they are supposed to be morally neutral.

Yet it is this power to think in moral terms, to decide what we should do according to what is good or evil, right or wrong, which makes us human. This is how we think about ourselves as something more than bodies with only wants to satisfy. Shortly before he died, Ortega y Gasset contributed to the Partisan Review (in 1952) an essay titled "The Self and the Other" in which he proposed that the capacity to reflect, to make decisions independent of the pressures of circumstance or bodily desires, is what distinguishes man from the animals. He said:

But, you will ask, does man perchance not find himself in the same situation as the animal—a prisoner of the world, surrounded by things that terrify him, by things that enchant him, and obliged all his life, inexorably, whether he will or no, to concern himself with them? There is no doubt of it. But with this essential difference—that man can, from time to time, suspend his direct concern with things, detach himself from his surroundings, ignore them, and subjecting his faculty of attention to a radical shift—incomprehensible zoologically—turn, so to speak, his back on the world and take his stand inside himself, attend to his own inwardness or, what is the same thing, concern himself with himself and not that which is *other*, with things.

Man, in Ortega's point of view, has two distinctively human powers—he has the power of "withdrawing himself from the world," and he has the power of "taking his stand within himself." These powers, he says, "are not gifts conferred upon man." "Nothing that is substantive has been conferred upon man. He has to do it all for himself." He goes on:

Hence, if man enjoys this privilege of temporarily freeing himself from things and the power to enter into himself and there rest, it is because by his effort, his toil, and his ideas he has succeeded in retrieving something from things, in transforming them, and creating around himself a margin of security which is always limited but always or almost always increasing. This specifically human creation is technics. Thanks to it, and in proportion to its progress, man can take his stand within himself. But, conversely, man as a technician is able to modify his environment to his own convenience, because, seizing every moment of rest which things allow him, he uses it to enter into himself and form ideas about this world, about these things and his relation to them, to form a plan of attack against his circumstances, in short, to create an inner world for himself. From this inner world he emerges and returns to the outer, but he returns as protagonist, he returns with a self which he did not possess before he returns with his plan of campaign: not to let himself be dominated by things, but to govern them himself, to impose his will and his design upon them, to realize his ideas in that outer world, to shape the planet after the preferences of his innermost being. Far from losing his own self in this return to the world, he on the contrary carries his self to the other, projects it energetically and masterfully upon things, in other words, he forces the other—the world—little by little to become himself. Man humanizes the world, injects it, impregnates it with his own ideal substance and is finally entitled to imagine that one day or another, in the far depths of time, this terrible outer world will become so saturated with man that our descendants will be able to travel through it as today we mentally travel through our inmost selves he finally imagines that the world, without ceasing to be the world, will one day be changed into something like a materialized soul, and, as in Shakespeare's Tempest, the winds will blow at the bidding of Ariel, the spirit of ideas.

Yet for Ortega, this is only a possibility, not a destiny. We must choose it. We have our two

sides and ally ourselves with either one or the other.

Because if for a moment, so that we may understand one another here and now, we admit the traditional idea that thought is the characteristic of man—remember man, a rational animal—so that to be a man would be, as our inspired forefather, Descartes, claimed, the same as to be a thinking being, we should find ourselves holding that man, by being endowed once and for all with thought, by possessing it with the certainty with which a constitutive and inalienable quality is possessed, would be sure of being a man as the fish is in fact sure of being a fish. Now this is a formidable and fatal error. Man is never sure that he will be able to carry out his thought-that is, in an adequate manner; and only if it is adequate is it thought. Or, in more popular terms, man is never sure that he will be right, that he will hit the mark. Which means nothing less than the tremendous fact that unlike all other beings in the universe, man can never be sure that he is, in fact, a man, as the tiger is sure of being a tiger and the fish of being a fish.

This is Ortega's Iberian way of declaring that we are unfinished beings, neither whole nor unified. We may risk the opinion that the Buddha was a unified man with a single nature, and say the same of Christ and of a few more out of the past, but the rest of us are still working on the project, laboriously making ourselves, and also making mistakes.

Ortega has more to say on this question, since it is of such great importance.

Far from thought having been bestowed upon man, the truth is—a truth which I cannot now properly argue but can only state—that he has continually been creating thought making it little by little, by dint of a discipline, a culture or cultivation, a millennial effort over many millennia, without having yet succeeded—far from it—in finishing his work. Not only was thought not given to man from the first, but even at this point in history he has only succeeded in forming a small portion and a crude form of what in the simple and ordinary sense of the word we call thought. . . .

While the tiger cannot cease being a tiger, cannot be detigered, man lives in the perpetual risk of being dehumanized. With him, not only is it problematic and contingent whether this or that will

happen to him, as it is with the other animals, but at times what happens to man is nothing less than ceasing to be man. And this is true not only abstractly and generically but it holds for our own individuality. Each one of us is always in peril of not being the unique and untransferable self which he is. The majority of men perpetually betray this self which is waiting to be; and to tell the whole truth our personal individuality is a personage which is never completely realized, a stimulating Utopia, a secret legend, which each of us guards in the bottom of his heart. It is thoroughly comprehensible that Pindar resumed his heroic ethics in the well-known imperative: "Become what you are.

Nothing, surely, throws so much light on contemporary history—or all history—as this way of considering human beings. It is as Pico della Mirandola declared at the end of the fifteenth century: *We make ourselves;* and we are still far from expert. The betrayals are many, the integrities few.

But how shall we read the demand of Pindar? What are we, if we have need of becoming it? In essence and root, one could say, we are thinkers and their thought. We suppose that thought is unsubstantial, ephemeral, something that can be blown away by a strong breeze. Yet our lives, the whole of them, are constructions of thought. Thought is the enduring substance of our being. Our bodies are only imperfect and transient reflections of thought, or so both Buddha and Plato would have us believe. And Paul, the architect of the Christian faith, maintained that when we die we occupy a "spiritual body" that is raised incorruptible—that there is, in short, a continuing essence. But in a body or out of it, the flow of our thought goes on. Is there any father, privileged to look into the eyes of his new-born babe, who is not convinced of this? As a man who delivered his daughter, alone in a mountain cabin with his laboring wife, said afterward: "Yet her face on emerging—and I'd seen it first, before anyone or anything else in this world—had been Buddha-like, cowled with history . . . "

We, then—the only "we" worth talking about—are the stuff of consciousness, on which

the winds of heaven and earth both play. These are the two sides of our lives, and each has its story to tell, with as much or more fiction than fact. The side which relates to the earth and the body, unless balanced by the intuitions which sometimes come through consciousness, suggests that we are shaped by outside forces. This version of the character of our lives may be in the form of what we call religion, since the idea of a God who is the "creator" who makes the world and everything in it is every bit as much a materialistic doctrine as the claim that the vast sequence of events which generated the sun and the planets took place wholly by accident, although under the rule of physical law. We, as conscious intelligences, had nothing to do with it, whether we were produced by a great being who is essentially incomprehensible or by certain physical and chemical accidents which cannot be understood in terms of purpose because there isn't any.

Then there is the other side, represented by the teaching of ancient philosophers, who remain silent about ultimate beginnings but convey the idea that consciousness itself could never have a beginning and that all that exists is made up of sparks or centers of awareness, not productions of matter although confined in material forms. Plato, for example, held that the body is a kind of prison for the soul, a container which needs to be refined and made porous to receive the expressions of our higher intelligence, so that our lives may have balance and fruit.

This is another way of thinking of the two sides of our being—the godlike and the animal. Experience seems to confirm this view, since there have actually been godlike humans, if only a few; and a great many people who behave like animals although they have minds. In consequence of this contrast, we have almost countless tales of who and what we are, where we came from, and a great many counsels concerning what we ought to do. So there are religion and science, and in

addition what we call "literature" made up of works of the imagination.

The value of literature lies in its provocation and its absence of finality. Needless to say, both religion and science may have literary components which serve in the same way. And sometimes literature tries to be scientific, losing sight of the fact that science is soon "dated," which makes its content dull and uninteresting. The true literary man might be represented by Ibsen, who said: "My business is to ask questions, not to answer them." As Joseph Wood Krutch has remarked (in *If Yon Don't Mind My Saying So*):

To the poet, theories are never more than a sort of prevailing mythology which he accepts as a skeleton, but which he clothes with the living flesh of the poetic imagination. If he forgets this and writes as though his only business were to expound or illustrate what philosophy, or religion, or science is teaching, then he writes plays essentially worthless in themselves and bound to be recognized as such when intellectual fashions change.

This seems a way of saying that we have to instruct ourselves. The framework of current belief, whether religious or scientific, or a combination of both, will eventually wear out and be replaced. But the writer who asks the important questions will never go out of style so long as we are able to understand the language he uses. Again as Krutch says:

The problem of why Hamlet behaves as he does is dramatically interesting. Try to explain it all by saying, "He had a mother complex," and only a very dull play remains. Most of Shakespeare's tragedies continue to be interesting because we can never quite make up our minds whether their heroes are destroyed by fate or whether their own characters and passions lead them to destruction. . . .

Of all the Americans plays exhibiting the influence of Freud, *Strange Interlude* is certainly the best. Is it not the best just because O'Neill did not write it to expound what he had just learned about Freudian doctrine, but used that doctrine much as Sophocles used Greek myth, simply as a schema around which a dramatic story could be organized? If the time should ever come when we no longer believed in Freud, *Strange Interlude* will not be much

more diminished by our loss of faith than *Oedipus Rex* is diminished because we no longer believe in Greek myths....

A certain professor of poetry at Oxford once remarked that the trouble with "didactic poetry" is that you can't learn anything from it. And that is exactly what is wrong with "scientific" plays. You can't learn anything from them—not any science because you already know that from a better source; not anything other than science because the playwright has surrendered the attempt to say anything as a playwright. What we really want of him is a poet's insight, not second-hand psychology, or economics, or sociology. . . . That there are other kinds of knowledge is demonstrated by the fact that something is still to be learned from Sophocles or Shakespeare. Our playwrights would do well to try to find out what it is.

That human beings have two sides, strangely intermingled, producing effects mysteriously diverse, is a part of what they might learn.

REVIEW AFRICAN DISASTER

PAMPHLETS are not now a popular medium of expression. Bookstores don't like them, libraries don't know what to do with them and usually just file them, and reviewers either ignore or allow them a paragraph to fill up space at the end of a Yet pamphlets have been the nerves column. which transmit revolutionary impulses, and may, if a means of distributing them can be found, again become a major factor in public education. We have one of eighty pages which has all the importance of a full-length book and deserves attention by reason of its subject and the clarity of its expression—Worldwatch Paper No. 65, Reversing Africa's Decline, by Lester R. Brown and Edward C. Wolf. Brown is president and Wolf a senior researcher of the Worldwatch Institute, 1776 Massachusetts Ave. N.W., Washington, D.C. 20036. The price of the pamphlet is \$4.00.

The authors begin:

A report from the U.S. Embassy in Addis Ababa in 1978 indicated that the Ethiopian Highlands were losing over a billion tons of topsoil per year through erosion. Any agronomist who saw that report knew that unless immediate action was taken to arrest the loss, Ethiopia was headed for a famine even greater than the one that toppled Haile Selassie's government four years earlier. The only question was exactly when it would come.

For those who are not agronomists, the reported loss of topsoil was an abstraction. Only when it is translated into images of starving Ethiopian children on television screens around the world some six years later did this gradual loss of topsoil acquire a human dimension.

The hunger in Ethiopia is a condition prophetic of other areas of Africa where soil is diminishing and population growing. "Africa is losing the ability to feed itself." In 1950 the continent had 219 million people, today there are more than 531 million, a growth of two and a half times. Of this total, 140 million are fed entirely with grain from abroad. During the same period

the number of livestock has nearly doubled, leading to overgrazing and a reduction of land for crops. Grain production throughout the continent has been declining since 1967, with only a few countries escaping the trend.

Also since 1967, "Africa has seen 17 straight years of below average rainfall." All but one year was ten per cent below estimated natural rainfall, while the last two years "have been more than 40 per cent short." The quest for remedies leads to unsettled issues. The authors say:

Almost two decades of depressed rainfall raise a central question: is this a temporary decline or a new long-term trend? Decline may be due exclusively to oscillations in the global circulation of the sort that have caused droughts historically. Or it may be caused by vast land-use changes such as deforestation that increase water runoff, reduce evapotranspiration, and increase reflectivity (albedo). If the dryness of the last 17 years is temporary, then governments should concentrate on emergency food relief while waiting for the rains to return. While greater investment in agriculture and family planning is unquestionably needed, much of the continent s food shortfall would be eliminated by the return of "normal" rainfall. If, however, population-induced changes in land use and soil degradation are gradually reducing average rainfall, then far more urgent and ambitious measures are needed.

Meteorologists are not agreed on this question. Some think that the drought period is temporary or "natural," others believe that deforestation has actually changed the climate by reducing the transpiration and evaporation that lead to cloud formation over trees, and resulting rain. But present opinion seems to be swinging toward the idea of a permanent change in climate; since this is a matter in which we cannot afford to guess wrong, planting lots of trees would be of great benefit from any point of view. Following is an important passage:

Scientists studying the hydrology of the Amazon Basin have acknowledged the importance of the scale of land-use changes in influencing that region's climate. "Hydrologists have been inclined to discount the possibility that changes in land use can affect rainfall," wrote Brazilian scientists Eneas Salati and

Peter Vose in an article in *Science* magazine. "That may be true if the area being converted is small in relation to the whole geographical-climatological zone and if the major proportion of the precipitation is advective [horizontal movement of air] and not dependent on recycling. However, it is almost certainly a fallacy where large amounts of water are being lost to the system through the greatly increased runoff associated with widespread deforestation and where the existing rainfall regime is greatly dependent upon recycling."

The conversion of tropical forests to cropland dramatically alters the hydrological cycle. Little research has been done on this in Africa. But research on a watershed in the central Amazon indicates that when rain falls on a healthy stand of tropical rain forest, roughly one-fourth runs off, returning to the ocean, while three-fourths re-enters the atmosphere either as direct evaporation, or indirectly through the transpiration of plants. After the rain forest is cleared for cropping or logging this ratio is roughly reversed, with three-fourths of the rainfall running off immediately and one-fourth evaporating to recharge the rainclouds.

After several pages devoted to means of slowing down Africa's population growth, with the goal of a two-child family, the authors take note of Africa's generally inadequate conditions for agriculture:

Africa's croplands are not among the world's oldest, but few regions have a poorer natural endowment of productive soils. Glaciers that left fertile mineral paths across Europe and north America never reached Africa. Nutrient-poor soils over much of the continent face months of intense sunshine followed by punishing seasonal rains that can carry away exposed topsoil in sheets.

On this vulnerable land base, Africa's total harvests of cereal grains have doubled since midcentury. But while the yields of wheat and maize have risen modestly, the yields of subsistence staples, including sorghum and millet, have been stagnant or even declining. Food production on the continent has increased primarily by expanding the cultivated area—often onto steep land with unstable soils, or into forests whose thin soils are quickly depleted by a few seasons of plowing. In the Sahel, millet and sorghum harvests have increased even more slowly than the outright increase in cultivated area, indicating that agriculture has advanced onto marginal land that cannot sustain yields. The need to

keep this land in production in good years and bad has hastened erosion.

The rest of the pamphlet is devoted to the things that need to be done, beginning with reforestation. The authors write about a number of steps to be undertaken, simply because they can be done, and one or two African countries are already doing them. The problem is dual. The people must be educated to help, and the political will of the leaders needs to be exerted in behalf of the long term. The authors say:

With environmental deterioration undermining economic progress all across Africa, the only successful economic development strategy will be one that restores the natural systems on which the economy depends. Reversing Africa's decline will require carefully orchestrated national efforts to organize millions of people to plant trees, build soil conservation terraces, and plan families. An environmentally oriented effort to reverse trends in Africa will, of necessity, be people-based rather than capital-based. More capital will be needed, much more, but the heart of the reversal strategy will be the mobilization of people.

Inevitably, these specifications of what is needed to get a reversal going in Africa call to mind the activity of the TreePeople here in Southern California—the group, headed by Andy Lipkis, which recently succeeded in planting a million trees in the Los Angeles area to celebrate the Olympic Games held here in 1984, and which has been organizing tree-planting enterprises in the region for about fifteen years. The TreePeople group has now proposed and worked out many of the details for shipping young fruit trees to Ethiopia. They summarize the need at the beginning of the proposal:

The causes behind the African famine are complex, but most major studies point to the same starting place for healing the situation—planting millions of trees.

How can something so simple as tree-planting turn around such a massive situation of hopelessness? As it turns out, much of the current drought situation is linked to the rampant deforestation that has been taking place across the African continent over the past few decades. For example at the turn of the

century Ethiopia had more than 40% forest cover; now, less than 4% of the land is shaded by trees. The result is loss of soil, moisture, and the rapid expansion of deserts. And this situation isn't limited to Ethopia. The same pattern is occurring across the sub-Saharan region. . . .

Planting fruit trees targets several major problems at once. The trees will immediately begin to anchor the soil, provide needed shade from the sun and shelter from the wind, and, within one to two years, will begin producing an ongoing abundant supply of fruits and nuts. But the benefits don't stop there. Involving the local people in planting and caring for the trees provides an important opportunity for people to come together, to learn, to work, and to rebuild their sense of strength, community and dignity. When properly facilitated, the tree planting and maintenance activities can help build a bridge between conflicting groups, leading the way to bigger cooperative problem-solving efforts.

The germ of this idea came from TreePeople's discovery two years ago, that every year wholesale nurseries destroy surplus trees at the end of the bare-root season. After researching available species and the response that might be expected from low-income people, TreePeople arranged with the nurseries to take excess fruit saplings off their hands, haul them to TreePeople headquarters in refrigerated trucks, organize volunteer crews for preliminary pruning, and finally distribute the young trees to families that wanted them. After a year it was determined that 95% of the 26,000 fruit and nut trees given away had survived, many of them producing fruit.

Scaling this program for Africa requires much more planning and logistic complexities—and the U.S. Air Force, for one thing, has agreed to carry the trees to Ethiopia—but there is reason to think that this airlift will work. TreePeople are experts in people-based projects with years of experience in mobilizing the volunteer help that makes extensive plantings possible. Copies of this plan are available from TreePeople, 12601 Mulholland Drive, Beverly Hills, Calif. 90210.

COMMENTARY WE MAKE OURSELVES

THE quotations from Ortega in this week's lead article are an excellent example of why we so frequently turn to this Spanish philosopher and essayist in these pages. He does a kind of thinking which is far from common yet very much needed in our time. He writes about human potentiality or possibility, yet is tough-minded and critical about our present achievements. We could be so much better than we are.

Ortega was, we might say, a classical humanist. His work seems a splendid echo of Pico della Mirandola's Oration on the Dignity of *Man.* In the fifteenth century, Pico (1463-1494) composed this essay as introduction to his challenge to the doctors of the Church to debate with him nine hundred questions. The debate was not permitted by the Pope by reason of the heresies which were found implicit in some of the questions, but Pico did publish his introduction, in which he affirmed, when shorn of its allegorical garb, that man is self-created. Man the Creator tells him, has no endowment properly his own, save that which he himself determines. nature of all other creatures is defined and restricted within laws which We have laid down; you, by contrast, impeded by no such restrictions, may, by your own free will, to whose custody We have assigned you, trace for yourself the lineaments of your own nature. . . . We have made you a creature neither of heaven nor of earth, neither mortal nor immortal, in order that you may, as the free and proud shaper of your own being, fashion yourself in the form that you prefer." Man has the power to rise to divine heights, or to descend into a brutish life.

This seems precisely Ortega's view. "Nothing that is substantive has been conferred upon man. He has to do it all for himself." If we seem offprints of our environment, or of our genes, we are responsible for passive acceptance of such influences, since we have the power, as Ortega

says, of turning our back on them and taking a stand within ourselves.

Today, while the future looks ominous, the authority of the past over our decisions has considerably lessened. We are freer than ever before to think for ourselves, and more responsible, therefore, for what and how we think. Ortega saw this clearly, and sounded a tocsin in his wonderful prose.

CHILDREN

... and Ourselves

FOR HIGHSCHOOLERS

IN one of his briefly splendid newspaper articles (this one appeared in the Los Angeles Times for July 21) Henry Steele Commager reproaches a contemporary politician for being positive and sure about the meaning of the U.S. Constitution in respect to religion and the state. The historian's point is worth repeating and would be good for high school students to understand since they will soon be voting citizens. The Founding Fathers, Commager says, were far from clear agreement on some of the things they wrote into the Constitution. And sometimes they changed their minds, as in the case of James Madison who in 1791 fought the creation of a national bank, yet in 1813 "signed the law creating a second national bank." Mr. Commager continues:

The framers had only one clear and decisive mandate: To do whatever was necessary to make a Constitution "adequate to the exigencies of the Union." That was the phrase which appeared in all the State instructions to their delegates. And that phrase lends itself irresistibly to a great variety of interpretations. Because many of these could not be reconciled, the framers—sensible men that they were—took refuge in broad and ambiguous general phrases which, as John Marshall said in the great McCulloch vs. Maryland decision, were well-designed for "a Constitution intended to endure for ages to come and to be adapted to the various crises of human affairs."

Adapted is the key word.

As Commager points out, who can "say with certainty the meaning of such phrases as 'commerce among the several states,' or 'necessary and proper,' or 'the Executive power shall be vested in a President,' or 'provide for the General Welfare'." Equally uncertain in meaning is "an establishment of religion" and "unreasonable search and seizures."

Back in 1888, in his concluding chapter of *The American Commonwealth*, James B. Bryce,

comparing the British and the American constitutions, gave the palm to the British because it was "flexible" and the American "rigid." He was palpably mistaken. As its authors foresaw and as its great interpreters from Justice Marshall and Joseph Story to Oliver Wendell Holmes and Louis D. Brandeis, Harlan F. Stone and Earl Warren reaffirmed, the U.S. Constitution is not rigid, inflexible and paralyzed, but flexible, vital and dynamic, adapted, just as Marshall said, "to the various crises of human affairs."

Marshall also said:

"To have prescribed the means by which government should in all future times, execute its powers, would have been to change entirely the character of the instrument. . . . It would have been an unwise attempt to provide immutable rules for exigencies which, if foreseen at all, must have been seen dimly and which can be best provided for as they occur."

In short, we have, in some respects, a purposely general (vague) constitution. The Founding Fathers knew better than to nail down the future to their ways of thinking, which, after all, were not so certain even then.

We have another lesson, probably college level, from current material, this one taken from "The Talk of the Town" in the *New Yorker* for July 15. The writer begins by noting the failure of a TV executive to provide programs of better than ordinary quality. He made the mistake, a critic in the same business said, of succumbing to a fatal temptation—he dared to use his own aesthetic judgment. As the *New Yorker* put it: "He corrupted the purity of commercial dealings with artistic considerations."

Next quoted is the complaint of a buyer of books for one of the large bookselling chains. "People often write novels," he said, "because they want to tell a story, and how a book sells isn't their number one concern." This launches the *New Yorker* writer:

The production of art and entertainment for commercial reasons is an old story; what may be new is the elevation of this practice into a principle, and the establishment of a system based on it. Once, it was considered disappointing if an artist "sold out" his talent for commercial reasons, now the disappointment comes if a businessman compromises his profits for artistic reasons.

The writer turns to television ratings, with some quotation from Jim Duffy, ABC's president of communications. The executive shyly admitted that not all programming decisions are made on the basis of ratings, but only most of them.

Television has always made decisions on the basis of the ratings, but until now it didn't seem to have occurred to anybody to boast about the fact. The ad ended with Duffy smiling complicitly and saying, "It's a powerful combination—American television and *you*." But perfection in the new system is not attained until content is purged altogether, and the market forces are allowed to function without hindrance.

Back to books and bookselling:

When this happens in the book industry, it becomes unnecessary even to read the book. That seems to be what is happening with James Michener's forthcoming novel, "Texas," according to Mr. Hejney [the book buyer quoted above]. "This is such a big book that we don't need to read it or talk about it." he said. (None of which, of course, is to say that Michener's book lacks merit. Unbeknownst to Mr. Hejney, it may be packed with merit.) But if the contents of a book are immaterial, then what does sell a book? A "brand name" author, such as Mr. Michener is one thing. An eye-catching jacket is another. "Page count" is still another. "Serious books should be weighty," Hejney said—meaning not that they should be profound but that they should literally weigh a lot. So far, unit pricing has not been adopted for books, but the day may not be far off when you walk into your local bookstore and read, "RACINE, \$1.00 LB" or "MORE DOSTOYEVSKI FOR YOUR DOLLAR."

This scurrilous sequence of anecdotes ends with a political application. The classic view was that you looked out on the world, studied the chain of events, thought, and then decided to express your opinion in the marketplace of ideas. All that is over now.

But in the new system the ends of the chain have been joined to form a closed loop. The individual, instead of looking out on the world, looks out upon public opinion, trying to find out what the public would like to hear. Then he tries his best to duplicate that, and brings his finished product into a marketplace in which others are competing to do the same. The public, turning to our culture to find out about the world, discovers nothing but its own reflection. The unexamined world, meanwhile, drifts blind into the future.

* * *

Human Geography: Ladakh, an out-of-the-way place in the northernmost part of India, has 120,000 people, mostly Buddhists, who live—or used to live—natural lives in a very harsh climate. Here we want to tell about the impact of Western civilization on the Ladakhis, which began only in 1974. Until then they did everything very well, with no one really poor. Helena Norberg-Hodge, who has lived there off and on for about ten years, tells in *Resurgence* for last May/June of her efforts to show the Ladakhis what a mistake it is to copy the West, especially since intelligent Westerners are trying to do a lot of things the way the Ladakhis do them. Now they are being subjected to Western methods of education.

Children struggle with the *Iliad*, and don't learn how to make shoes from yak hair, or how to build an adobe house. If they learn how to build, it is as an engineer with concrete and steel. If they learn how to make shoes, it is from plastic in a factory. If they learn how to grow barley, it is out of books based on the monocultural system, with no allowance for local diversity. These books have no idea about the conditions at 11,000 feet and the wide variety of barley that has grown there and all the local knowledge of minute differences in soil and climate which the local farmer is in tune with. The practical result is that the educated children cannot survive in the village.

She is teaching them that the West is now pursuing ideals which exist as facts in Ladakh, "that people in the West will pay more to eat brown bread, and buy pure wool and cotton and even pay £2,000 for a composting toilet, which is in principle exactly like a Ladakhi one!"

FRONTIERS Who Will Be In Charge?

IN his book, *The Grand Canyon*, Joseph Wood Krutch repeats the exclamation of the American dowager who, looking out over the Canyon, declared "You can't tell me man didn't have anything to do with this!"

For Mr. Krutch and most of his readers, this was a fairly funny joke, but now a writer in *Harper's* (for August) proposes to take the idea seriously. Frederick Turner, who teaches "Arts and the Humanities" at the University of Texas in Dallas, begins an article:

Suppose the Grand Canyon were man-made. It could have been formed (though it wasn't) by agricultural or industrial erosion; the results of poor farming methods can look very similar—artificial badlands—if on a smaller scale. Would this hideous scar on the fair face of earth still be a national park? Would anyone visit it other than groups of awed schoolchildren studying Environmental Destruction, absorbing the dreadful lesson of what can happen to a desert raped by human exploiters?

Professor Turner, without even starting a new paragraph, goes on to make a case for man-made disasters:

Strip mining can produce spectacular and dramatic landscapes. W. H. Auden loved the leadmining landscape of Cornwall above all others; the evocative and aromatic hillsides of the Mediterranean, with their olives, sages, thyme, and dwarf conifers, are a result of centuries of deforestation goat herding, and the building of roads and cities. The Niagara Falls may one day have to be shored up to make them look "natural"; for they are eating their way back an inch a year and will "naturally" dwindle into ordinary rapids.

Can he be serious? He is at least partly serious. Here he is writing about words. Are we humans children of nature? he asks. If we are, then everything we do is natural, and nothing is really artificial. These terms make a distinction without a difference. He seems quite serious about this:

If we want to fall back on saying that the natural is what has not been interfered with, as opposed to, say, the artificial, science will give us little comfort. For a scientist, who must take observable and measurable evidence as the only warrant for the reality of being, the universe is exactly and only the interference of everything with everything else. Ouantum theory shows that nothing can be observed or measured without being interfered with; if nature is what has not been interfered with, nature does not exist.

Mr. Turner quotes a book by scientists to show that uncombined oxygen is a "poison gas," even though it is produced by plants.

Our precious oxygen, then, is the toxic waste of the first polluters. Imagine the cataclysm this must have been for those early life-forms: for millions of years, the poison advanced and retreated. . . . But the pollution won in the end and the "natural" species of the time were replaced by what our authors call "a new, highly successful mode of evolutionary advance, one based chiefly on the development of new morphology." . . .

If we define nature as the unreflexive, the unpremeditated this does not get us off the hook. Obviously, it would be foolish to impute human values and motives to natural phenomena other than ourselves. But it would be even more foolish to assert uniqueness in the possession of motives and values. It would be clearly wrong to deny that a raccoon can see because it doesn't have the same sort of brain as we do. It would be just as wrong to deny to the raccoon the calculating, and in some sense self-aware, intentions that its every move with relation to the garbage can announces.

By now a salutary confusion has overtaken the reader, making him docile. There is really no escape from nature—we take it with us wherever we go and whatever we do. Yet "Americans confronted with a natural landscape have either exploited it or designated it a Wilderness Area." What is Mr. Turner getting at? He is no "deep ecologist," convinced that the less important we think human beings are, the better able they become to fit in properly with the rest of life. Instead of the reduction of human beings to inoffensive and well-behaved ciphers in the

landscape, he would have us accept larger responsibilities. He says:

I believe we must trust human intention more than human instinct, since intention evolved out of and as an improvement on instinct. But if intention is thus to be trusted, it must be fully instructed in the instincts that are its springboard and raw material; otherwise, intention may do more harm than good. For this instruction we must turn not only to the human sciences but also to the species' ancient wisdom as it is preserved in myths, rituals, fairy tales, and the traditions of the performing arts. Perhaps our soundest model will be the art of gardening.

We know that we can ruin things, especially complex and subtle things, by that domineering overconsciousness that Coleridge saw in himself as "the intellect that kills" and that Keats diagnosed in him as an "irritable grasping after fact and reason." Shakespeare implies in *The Winter's Tale* that the human transforming power need not be like that at all.

At last Prof. Turner reveals himself. He has no generous license for technology, but a charge to the people who develop and use it.

We must take responsibility for nature. That ecological modesty which asserts that we are only one species among many, with no special rights, we may now see as an abdication of a trust. We are, whether we like it or not, the lords of creation; true humility consists not in pretending that we aren't, but in living up to the trust it implies by service to the greater glory and beauty of the world we have been given to look after. It is a bad shepherd who, on democratic principles, deserts his sheep.

The time is ripe to begin planting the American garden. . . . The American garden will not just be what George Steiner calls an "archive of Eden": a collection of good ideas from elsewhere. Such a vision of America derives from the suicidal European notion that we are at the end of history, with nothing left to us but a cataloguing of the past or a suitably tasteful self-annihilation. But if we are to avoid being merely derivative, we must be bold in our assessment of the raw materials of the American garden, and reject nothing until it has fully proved its uselessness. . . . There is enough room to plant gardens for all the citizens of the republic, not just a wealthy aristocracy. Let us make a virtue of the colossal earthworks we have dug for our industrial purposes, and of our capacity for truly heroic alterations of the landscape.

So long as we know what we are doing, this seems like a magnificent frontier idea. But it might be a fatal mistake to begin before our people are ready to put men like Mr. Turner and his myths and fairy tales in charge.