VOLUME XXXIX, NO. 11
MARCH 12, 1986

MORALITY IS PRACTICAL

IT seems time to take up an old question or argument. Which is superior and controlling, attitudes or actions? The modern vote is for action, it being said that attitudes are subjective, unreal. And it is certainly true that some attitudes are unreal and without much effect. But there are other attitudes which regard action as the execution, on occasion, of an inner stance, and there are those who declare that there is no important distinction between the two, save the matter of time. An attitude represents the comprehension of a meaning; so does an action, if it flows from comprehension. But an action which lacks understanding of the meaning it is intended to fulfill is either ignorant or fraudulent in its origin.

Upon what do attitudes depend? They grow out of reflection upon meaning, which is to say human purpose. For example, in 1755, Eleazar Wheelock, a Presbyterian preacher who later founded Dartmouth College, began a school to teach the Indians. What did he teach them? The Shorter Catechism, he proudly related. But there was more. At Moor's School (named for the man who gave the land for the school), Wheelock saw his goal as "civilizing the Indians and teaching them 'Knowledge of the only true God and Savior'." The Indians were taught not only English, but Latin and Greek as well. Of two of his pupils Wheelock wrote that they "will now read Tully, Virgil, and the Greek Testament very handily." While the school continued for some years it was not a success and Wheelock later merged it with Dartmouth in New Hampshire, which he began in 1769 in Hanover, using funds raised in England by an Indian missionary he had taught. The money was supposed to be used to teach Indians, but since Indians were rapidly becoming scarce Wheelock settled for teaching white colonist boys who would, he explained, teach the Indians. Wheelock, one could say, was a man of action, but hardly one of reflection. What good were Latin and Greek to Indian youths?

But that was more than two hundred years ago! Is there today a deepened attitude and more reflection about education? In *The Phenomenon of Change*, an elaborate publication of the Cooper-Hewitt Museum, a part of the Smithsonian Institution, Harold G. Shane, a professor of education, writes of the need for far-reaching change in the methods of education. In his concluding paragraphs he discusses "The Revolution in communication," saying:

> With the perfection of the microchip—and the microtechnologies that it either made possible or facilitated—society both in America and on a global scale, began to experience enormous changes. By 1980, more than 40 per cent of the U.S. population was employed in processing information, and the personal microcomputer had permeated millions of households.
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> Communication via satellite and fiber optic networks also is an important component in the revolution created by developments in electronics. . . . Another development that stretches the educational imagination is the phenomenon of world-wide twenty-four-hour television, which in some localities in the United States already provides a selection of more than a hundred program choices. So pervasive and powerful has television become that Neil Postman, the New York University media ecologist, speculates that television may well lead to the "disappearance of childhood" as we have heretofore known it. Furthermore, he reports, over six hundred thousand children of elementary school age were watching late-late movies last year between midnight and 2 a.m.

Mr. Shane might have added that for Mr. Postman, childhood is "disappearing" because adults who watch television are losing their reflective powers as adults and reverting to childhood. The article on education continues:

> Other matters of educational significance are (1) the microcomputer's potential contributions to the handicapped (2) alternative possibilities for improving the education of the disadvantaged, (3) new developments in the realm of teaching aids useful in mathematics, music, the sciences, and foreign language instruction, (4) positive and negative aspects of new child-computer relationships, which psychologists are exploring, (5) "distance learning" made possible by "the chip" in the household through sources of input such as viewdata, teletext, and Qube, and (6) the curriculum frontiers made possible by an electronic environment.
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> Two things seem safe to predict: we will be in for many surprises as the present century wanes, and the years to come promise to be exciting and interesting ones for parents, teachers, and children.

This case for "computer literacy" needs tempering, to say the least. A computer without a program is nothing at all, and those who learn to use computers, if they go beyond the expediting of their own natural skills and factual resources, are relying on the external authority of the programmer, who may or may not have a grasp of what a computer can or can not be expected to do. As Joseph Weizenbaum, professor of computer science at MIT, has said in *Computer Power and Human Reason:*

> It happens that programming is a relatively easy craft to learn. Almost anyone with a reasonably orderly mind can become a fairly good programmer with just a little instruction and practice. And because programming is almost immediately rewarding, that is, because a computer very quickly begins to behave somewhat in the way the programmer intends it to, programming is very seductive, especially for beginners. Moreover, it appeals most to precisely those who do not yet have sufficient maturity to tolerate long delays between an effort to achieve something and the appearance of concrete evidence of success. Immature students are therefore easily misled into believing that they have truly mastered a craft of immense power and of great importance when, in fact, they have learned only its rudiments and nothing substantive at all.

Of the teacher of these skills, Weizenbaum says that if he regards himself as a "mere trainer," he invites his students "to become mere followers of other people's orders, and finally no better than the machines that might someday replace them in that function." He goes on:

> Finally, the teacher of computer science is himself subject to the enormous temptation to be arrogant because his knowledge is somehow "harder" than that of his humanist colleagues. But this hardness of the knowledge available to him is of no advantage at all. His knowledge is merely less ambiguous and therefore, like his computer languages, less expressive of reality.

Here the importance of attitude seems plain enough. The mania for computer literacy is based on the search for "authority" in a world where most of the conventional authorities have been collapsing, year by year. As a reading of Weizenbaum and some others in this field will show, the computer has an important place in a technological society, but its role is limited, while its dehumanizing effects in various human relations are already well known. Moreover, "computer literacy" is by no means a replacement of ordinary literacy. The ability to write a coherent sentence, to use memory and imagination to the advantage of both writer and reader, is a far more desirable objective than being able to punch the right keys in a machine.

Some years ago, in a conference at the Rand Corporation in Santa Monica, the question or problem of U.S. foreign policy was discussed. One Rand expert, a skillful mathematician, said that it didn't matter how other countries felt about us, so long as they *feared* us. There was of course dissent to this idea, but he had only defined the policy the country has adopted and followed for a long time. It is still our policy, a policy based on action with a show of potential force. This is the policy maintained by powerful empires throughout our historical period. It was the policy of Rome, of Britain, and is now the policy of the United States in both Europe and Asia, South and Central America.

After a fashion the policy has worked. As Ronald Glossop says in *Confronting War,* in a discussion of the Cuban missile crisis in 1962:

> Why did Khrushchev direct the Russian ships to turn back? It may have been because the two nations had reached an understanding that the U.S. would not assist any further efforts to overthrow the Castro regime. There may also have been other factors, but an important consideration undoubtedly was the fact that at that time the U.S. had about a 5 to 1 superiority in the number of atomic weapons which could be delivered by long-range missiles and bombers. The Soviet Union had been coerced into ceasing its missile-building efforts in Cuba even though the Russians had some missiles capable of delivering atomic warheads onto U.S. cities. It was the overwhelming superiority of the U.S. in the quantity of available nuclear warheads and delivery systems which had been decisive.

So the Kennedy policy was successful—or was it? Glossop continues:

> As a result of this incident, the Russians were convinced that it was not sufficient to have some missiles with nuclear warheads which could strike the U.S. They began a massive missile-building program and increased their defensive capabilities against U.S. bombers. It was the stimulus of the Cuban missile crisis and its outcome that led the Russians to conclude that military power was necessary not just for defense of the homeland but also for success in international bargaining.

The argument about whether our policy is the "right" one is not an argument that anyone looks forward to having settled by experience, by reason of the extraordinary cost of finding out that it is wrong: so many people would have to die to prove it!

The experience of history, however, is not encouraging and the opponents of using military force to cow our possible enemies are growing in number. Guerrillas and terrorists are not diminished but increased by the threat of nuclear war, which now seems virtually useless except as a threat. Terror, whether nuclear or the assassin's, is now the weapon of choice. This is the attitude of men driven almost to insanity. Costs are not calculated by terrorists.

We turn now to considerations provided by Wendell Berry in a long essay, "Discipline and Hope," which first appeared in *A Continuous Harmony* and was reprinted in *Recollected Essays* (North Point Press, 1981). The following is from the section, "The Practicality of Morals":

> What I have been preparing at such length to say is that there is only one value: the life and health of the world. If there is only one value, it follows that conflicts of value are illusory, based on perceptual error. . . . Moral value, as should be obvious, is not separable from other values. An adequate morality would be ecologically sound; it would be esthetically pleasing. But the point I want to stress here is that it would be *practical.* Morality is long-term practicality.
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> Of all specialists the moralists are the worst, and the processes of disintegration and specialization that have characterized us for generations have made moralists of us all. We have obscured and weakened morality, first, by advocating it for its own sake—that is, by deifying it, as esthetes have deified art—and then, as our capacity for reverence has diminished, by allowing it to become merely decorative, a matter of etiquette.
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> What we have forgotten is the origin of morality in fact and circumstance, we have forgotten that the nature of morality is essentially practical. Moderation and restraint, for example, are necessary, not because of any religious commandment or any creed or code, but because they are among the assurances of good health and a sufficiency of goods. Likewise, discipline is necessary if the necessary work is to be done; also if we are to know transport, transcendence, joy. Loyalty, devotion, faith, self-denial are not ethereal virtues, but the concrete terms upon which the possibility of love is kept alive in this world. Morality is neither ethereal nor arbitrary; it is the definition of what is humanly possible, and it is the definition of the penalties for violating human possibility. A person who violates human limits is punished or he prepares a punishment for his successors, not necessarily because of any divine or human law, but because he has transgressed the order of things. (The order of things, of course, *is* a law—and not a human one.) A live and adequate morality is an accurate perception of the order of things, and of humanity's place in it. By clarifying the human limits, morality tells us what we risk when we forsake the human to behave like false gods or like animals. . . .
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> The invention of atomic holocaust and the other manmade dooms renews for us the immediacy of the worldly circumstances as the religions have always defined it: we know "neither the day nor the hour. . . ."

> Our bewilderment is not the time but our character. We have come to expect too much from outside ourselves.

For Berry, and for the rest of us if we will, attitude and act are parts of each other. Men of a certain attitude perform acts as the natural completion of their thinking. Their decisions are a subordinate function of larger choices made in reflection. If they are wise, the actions come at the right time and in the right place. If they are not wise, they learn from their mistakes. As Berry says:

> If we are in despair or unhappy or uncomfortable, our first impulse is to assume that this cannot be our fault; our second is to assume that some institution is not doing its duty. We are in the curious position of expecting from others what we can only supply ourselves. One of the Confucian ideals is that the "archer, when he misses the bullseye, turns and seeks the cause of the error in himself."
>
> Goodness, wisdom, happiness, even physical comfort, are not institutional conditions. The real sources of hope are personal and spiritual, not public and political. A man is not happy by the dispensation of his government or by the fortune of his age. He is happy only in doing well what is in his power, and in being reconciled to what is not in his power. Thoreau, who knew such happiness, wrote in "Life Without Principle": "Of what consequence, though our planet explode, if there is no character involved in the explosion? In health we have not the least curiosity about such events. We do not live for idle amusement. I would not run around a corner to see the world blow up."

Thoreau was not being heroic: that was the way he felt. Morality, when it is firm, has this character, the simple exemplification of a human being's stance, a natural affirmation rather than a calculation, made without excitement. It is no show of virtue.

In the closing chapter of his book, "Against the Imperialism of Instrumental Reason," Prof. Weizenbaum considers areas of human life which ought not to be invaded, he thinks, by scientific analysis, since they are, or ought to be, under the rule of moral values. He says:

> An individual is dehumanized whenever he is treated as less than a whole person. The various forms of human and social engineering we have discussed here do just that, in that they circumvent all human contexts, especially those that give real meaning to human language.
>
> The fact that arguments which appeal to higher principles—say, to an individual's obligations to his children, or to nature itself—are not acknowledged as legitimate poses a serious dilemma for anyone who wishes to persuade his colleagues to cooperate in imposing some limits on their research. If he makes such arguments anyway, perhaps hoping to induce a kind of conversion experience in his colleagues, then he risks being totally ineffective and even being excommunicated as a sort of comic fool. If he argues for restraint on the grounds that irreversible consequences may follow unrestrained research, then he participates in and helps to legitimate the abuse of instrumental reason (say, in the guise of cost-benefit analyses) against which he intends to struggle.
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> As is true of so many other dilemmas, the solution to this one lies in rejecting the rules of the game that give rise to it. For the present dilemma, the operative rule is that the salvation of the world—and that *is* what I am talking about—depends on converting others to sound ideas. That rule is false. The salvation of the world depends only on the individual whose world it is. At least, every individual must act as if the whole future of the world, of humanity itself, depends on him. Anything less is a shirking of responsibility and is itself a dehumanizing force, for anything less encourages the individual to look upon himself as a mere actor in a drama written by anonymous agents, as less than a whole person, and that is the beginning of passivity and aimlessness.
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> . . . the principal and most effective form of instruction we can practice is the example our own conduct provides to those who are touched by it. Teachers and writers have an especially heavy responsibility, precisely because they have taken positions from which their example reaches more than the few people in their immediate circle.
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> This spirit dictates that I must exhibit some of my own decisions about what I may and may not do in computer science. I do so with some misgivings, for I have learned that people are constantly asking one another what they must do, whereas the only really important question is what they must be.

Their attitudes represent what they are, while their acts are what they do.

How are attitudes shaped? This is the mystery of mysteries. Even within the same family, attitudes vary a great deal. Another puzzle is hypocrisy, which is pretension to an attitude one does not possess. Hypocrisy is eventually revealed by acts which contradict the attitude assumed, bringing pain to the pretender, who may be only half conscious that he has been playing a part. But character, such as was embodied in Thoreau's life and work—in Lincoln and in others across the centuries—where does it come from? Was this moral architecture begun in other, former lives? In any event, character is slowly formed by the combination of some innate sense of the fitness of things, by an intuitive feeling of Promethean obligations, by the counsels of the wise, and by the lessons of experience. In the face of human distinction and sometimes greatness, these words seem weak—as words usually are—yet they may intimate how the fibres of ethical and moral strength gain their stamina.

REVIEW
THREE BOOKS

IN 1962, Frederick Monhoff, architect, and Hildegarde Flanner, wife, poet and writer of memoirs, gave up their home in Altadena, in Southern California, and moved to the Napa Valley, after close to fifty years in the Los Angeles area, until smog and other intrusions—freeways and people—drove them north. There they had thirty acres and Mr. Monhoff designed a home with a water system, a deer fence, a garden, with plenty of room for plants and trees. No longer young with energetic and flexible bodies, they needed help to establish the place as they thought of it, and so they hired Mexicans who understood plants and gardens. A slim book, just published—*Brief Cherishing,* $10, issued by John Daniel, P.O. Box 21922, Santa Barbara, Calif. 93121—tells the anecdotal story of their life in the Napa River Valley.

It begins with an account of Miguel, who came well recommended by his Mexican American landlady—"He is nice boy, very nice man," and so he was. But Hildegarde Flanner, who ran the planting and gardening projects, already had a fine Mexican gardener, so she said to Miguel, when he showed up,

> "Wouldn't you be better off at home with your family where it is so much cheaper to live?" I had asked him. "It is not cheaper to live where there is no money to live on." This was the stark logic I had learned from his sober Spanish truth.
>
> It had cost him two hundred dollars, I learned later, to return to our valley to get work. So many others had also come that work was very scarce. I knew that he would hope to work as frequently as I would take him. That meant I must manage—and pay—two gardeners, one of whom I did not need and one who was one more than I needed or could afford. With a sigh I picked up the stout Cassell's Spanish-English dictionary I had bought for the vocabulary struggles of his earliest employment, and also notes I had kept. Again I nervously faced the fact that a long column of very common Spanish verbs are crankily irregular. So musical a language, and so mean. Also I began to ask myself about the eerie twilit decisions that afflict even the common daylight use of language in general. So many meanings were only demi-meanings, slippery statements of contradiction and self-denial where possibilities, threats and abraded truths hug each other weakly and desperately. *Perhaps,* in *spite of, not at all, whenever, although, however, in as much,* as I stop to consider these and their kind I long for simple pure profanity to hang onto. And how had the earliest speakers among the peoples of the earth ever managed to spit the roughage and toughage of trial meanings from their sore tongues and finally draw up to the board of clear communication?. . . .
>
> Miguel had returned. Did I need him? *No.* Did I have to hire him? *Yes*. Why? Don't be *estúpida.* Tomorrow I must be ready to greet him as it had been before, to assure him with thanks that I am well, to hope that he is well also, and that his family is well.

So, in the morning, she went to pick him up, as he had no transport. But he was not in Sra. Mendoza's "hotel." He had, she learned, gone to the big valley to pick apricots. But that night the phone rang and Mrs. Mendoza said that the hiring man in the valley had said, "For Chris' sake don't send us no more fruit pickers. We got too many." So Miguel was back and would be ready in the morning. Hildegarde said: "Tell Miguel to bring tortillas for his luncheon." "Tortillas!" the senora's voice was full of honest amazement. "How do you mean tortillas, honey? He's got no money to buy tortillas."

> I went to bed early, in dejection. Poor Miguel. No money for tortillas. That would take the nightingale out of anybody's whistle. I had no work to offer him, but I must think of something while I slept. Perhaps to rake up the withering fruit that fell slowly through my dreams.

Hildegarde Flanner, born in 1899 and still going strong, goes from interludes with Mexican gardeners to more serious moments, but always with a light and friendly touch. Her memoir is the story of an enduring love interrupted but not ended by death. The book is 94 pages of pleasurable reading about life in California, in the Napa Valley.

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Oskar Wladyslaw Milosz, who signed himself O.V. de L. Milosz, was born in Lithuania in 1877, later came to France and became a French poet. He died in 1958, practically unknown in the United States, although in that year one of his plays was successfully staged in Paris as part of a late revival of interest in his work. We were drawn to read about him by the introduction to a book by and about him—*The Noble Traveller*, published last year by the Lindisfarne Press ($14.95)—by Czeslaw Milosz, the Polish poet and writer who came to this country years ago and now teaches in the University of California in Berkeley. We first encountered Czeslaw Milosz by reading his book, *The Captive Mind*, which came out in 1953. This was a searching, poetic, but completely serious essay on how and why certain European intellectuals became defenders and advocates of Communism. The writer is compassionate yet uncompromising. He could not accept the propaganda into his mind, yet he understood what happened to those who did. We read and reviewed other books by Milosz as they came out, being glad, in a way, that he became a man without a country, for he remained impervious, also, to the persuasions of "free enterprise." But here, at least, he remains free to live and work. In his introduction to the book about his much older cousin, he speaks in one place of his "metaphysical poems":

> In *Ars Magna*, Milosz's detailed account of what happened to him on the night of December 14, 1914 is an attempt to convey his visual and auditory perceptions. It seems that only after that experience did he extend his reading to a field which would strangely agree with his nature—that of a man from around 1800, which he was by personal inclination—treatises on alchemy, the Kabbalah; Jakob Boehme, Paracelsus, the history of secret esoteric orders; and Emmanuel Swedenborg (though, let me stress this in advance, he cannot be called a Swedenborgian in a strict sense). He made use of what he read but kept his distance, discovering, nevertheless, a continuity of "the hermetic doctrine" throughout the ages and finding it present, under a cipher, in monumental achievements of the Western mind: in the architecture of Gothic cathedrals, in Dante—and in Rene Descartes.

Yet throughout his life Milosz regarded himself as a devout Roman Catholic.

The editor of this volume of nearly 500 pages is Christopher Bramford, who in his foreword calls Milosz "the last flower of Romanticism; a neo-Romantic, if you will." He adds: "But Milosz is a neo-Romantic only as Plotinus is a neo-Platonist."

The bulk of the book is taken up by Milosz's poetry, with various translators. Not being able to understand it very well, we make no comment except that it seems both melodious and obscure. In his introduction, Czeslaw Milosz says:

> He liked poets from the turn of the century, Byron, Holderlin, Chamisson, he was attracted by the fantastic and the bizarre. And though he was well read in philosophy, he would have assigned a higher rank to "the Anonymous Philosopher," Claude de Saint-Martin, than to Kant. Thus he was a spiritual brother of those who a hundred years before him had looked for a way out of the trap constructed by presumptuous Reason.

While there is no evidence that he read Blake, Czeslaw Milosz believes he had affinities with Blake which go beyond their common interest in Swedenborg: "Blake lived in the period of the victorious Newtonian concept of a mechanistic universe and rebelled against it, while O. Milosz, in his mature years, witnessed the ascent of Einsteinian physics (unheard of by him before his "inner sight" was opened) in which he found a confirmation of his new idea of time and space."

Perhaps one of the most interesting things about Oskar Milosz is the quality of the minds which have been attracted to his work.

* * *

We have from India a long book, *The Mahabharata—A Literary Study*, by Krishna Chaitanya, issued last year by Clarion Books, C-36, Connaught Place, New Delhi 110 001, India, which deserves particular if brief notice. (The price is 175 rupees.) As many readers know, the *Mahabharata* is the richest epic in all world literature. As the author says in his preface:

> Of all the epics we have inherited from the distant past, from the civilizations of antiquity, the *Mahabharata* is the greatest in terms of humanistic significance of characters and episodes, and in the insight into man's destiny revealed in their interlocking. . . . With its eighteen Parvans (Books or Cantos), twelve hundred chapters and over two hundred thousand lines of verse, the *Mahabharata* is eight times as long as the *Iliad* and the *Odyssey* put together, longer than the united extent of all the epic poems in European languages, three and a half times the Bible. . . .
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> Folk ballad has retold it in every region of India. It has been the inspiration of sculpture and painting, music and dance. Down the centuries, it has been the most important influence moulding the Indian psyche. As Sukthankar said in 1943, while recording the progress made on the critical edition, this book is "our past which has prolonged itself into the present. *We are it:* I mean the real *we."*

It is indeed the story of mankind—the tale of the struggle between two branches of an Indian family, the Pandavas and the Kurus, in which the Pandavas undertake to recover the kingdom which is rightfully theirs. The heart of the epic is the philosophical dialogue between Arjuna, the Pandava prince, and Krishna, avatar and spiritual teacher, who has become Arjuna's charioteer. Vyasa is the name given to the author of the epic. Mr. Chaitanya says at the end of his book:

> Images undergo protean transformation in the conscience of the guilty, subtly underscore the long reach of Karmic law, becoming quintessential summations of the whole story. . . . Poetry becomes philosophy without ceasing to be poetry; the *chanson de geste* becomes existential exploration. The concepts of all the systems are closely studied; but because of their insufficiencies, they are radically transformed, deepened in meaning, integrated into a unitary system of great stability, a world-view to which the most advanced modern thinking in a multiplicity of fields becomes a footnote. . . . *With the tall, tense figure with upraised arms directly addressing us, Kurukshetra becomes the whole modern world, we, mankind, replace Arjuna, and Krishna steps back to let his creator come forward and fling at as the challenge of a query, a deep-probing vast spreading interrogation that takes in all the ends of human existence.*

COMMENTARY
A LIVING PROCESS

AT the risk of becoming monotonous, we call attention once more to the virtual impossibility of effective teaching for children in the large, consolidated schools with big classrooms. Children need individual attention, and the teachers can't give it except to a reasonably small number of children. And since most teachers teach in big schools, they eventually adjust themselves to ineffective teaching instead of telling the truth to the public and the school's administrators. Who is responsible for the large schools? The bookkeepers who gave accounting reasons for consolidation of schools and school districts. They explain how much money will be saved, and the voters who, naturally enough, frown on more taxes, are pleased to go along. The complainers about education as it is don't want real changes, only "improvements" in what we are doing. The few who know that this is impossible, and who dare to say what they think, soon find themselves unpopular. Fortunately, again a few, go on saying what they think, giving their reasons. We try to find these people and repeat what they say.

Unfortunately, not many parents want to hear what they say. As a result, those who listen and attempt to change things themselves—teach their children at home, often after reading John Holt. These parents and most probably their children constitute an aristocracy, a good kind of aristocracy, who deserve this title, not by reason of either blood lines or wealth, but because of their qualities of mind and heart.

There seems little likelihood of anyone being able to make the lives of these people any easier, in our mass society. Philanthropists can spend money to create better institutions, but the few that seem successful eventually become like all the others in the acquisitive society—ruled essentially by money considerations. The good things accomplished for society are mortal, like everything else, unless they are continually reborn. That is the goal of all truly practical people, these days: try to establish living processes in people, by setting what example they can. The astonishing thing is, not that there are so many failures, but that there are successes, too. We try to write about them here, and to do what we can to keep them going.

CHILDREN
. . . and Ourselves
THE GIFTED AND TALENTED

In the fall issue of *Teachers College Record,* Barry L. Bull examines the claim that the exceptional promising young should be given special courses to bring out their qualities and fit them to be leaders for the improvement or reform of our society. He begins with what has been accepted as a definition of these children:

> Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Who are these children? As Mr. Bull shows, we don't know and we can almost never tell in advance. They do not reveal the marks of their promise at an early age, no matter what the professional qualifications of the observers. The prospect of giving them special training in order to produce "a steady supply of Mark Twains, Marie Curies, or Thomas Edisons" is illusory and based on insupportable conceits. Among the eminent since the Renaissance, the following gave no evidence in childhood of the potentialities which later blossomed, with notable historical consequences: La Fontaine, Cervantes, Copernicus, Cromwell, Rembrandt, Martin Luther, William Harvey, Lavoissier, Bach, Jenner, Locke, Newton, Beethoven, Kant, Adam Smith, and Leonardo da Vinci.

Moreover, says Mr. Bull, to gain the benefits which we assume these individuals will somehow produce for us, we need to know in advance the particular value of what they will do or bring about. "This requirement," Mr. Bull remarks, *"is* impossible to fulfill."

> To see why, let us consider whether it would have been possible in 1885 to have known that someone with the characteristics that Einstein had developed by 1905 would have been of special significance to our civilization. The obvious answer is, I believe, that we could not have known. In fact the reception that Einstein's paper received in 1905—it was by and large ignored or misunderstood for several years—suggests that even the physicists at the time did not know that they needed an Einstein. In this light, it is unimaginable to suppose that politicians or educators or anyone else could have selected children with Einstein's potential in 1885 in order to provide them with the instruction most likely to enhance their capacity to revolutionize physics. . . . To have known in 1885 that we needed an Einstein, we would, in effect, already have to have done the work we needed him to do. . . .
>
> The contention that special educational programs for the gifted and talented can increase the likelihood of our producing culturally significant individuals now appears to be insupportable because at least one of the premises on which it depends—that we can identify the potentially eminent as children—is not only false but betrays a radical misunderstanding of what a significant contribution to our culture entails.

What then should we do? Mr. Bull makes his opinion clear: We should improve the educational possibilities and their diversity for *everybody,* not for just a chosen few, especially since the few are unknown to us.

> Just as no child has any antecedent claim to a greater quantity of such resources than does another child, so, too, no one has a superior moral claim on a particular kind of resource. . . . Children have at best only tentative and vaguely formulated life plans. Their activities, especially with developmental resources, help them shape and crystallize those aspirations as they grow older—by exposing them to human possibilities, by allowing them to experiment with and discover their own abilities, and by enabling them to experience the potential value of a variety of human undertakings. To restrict systematically and autocratically children's access to resources necessary for participation in the most complex and demanding human activities available is to impose severe limitations in their feasible life plans. In a society dedicated to the enrichment and facilitation of individual aspirations, such restrictions must be viewed as morally impermissible.

Again, what *should* we do? Here, while under some difficulty, Mr. Bull tries to be specific:

Of course, since we cannot identify the potentially eminent, the programs we establish for this purpose must be nonselective. I recommend that we conceive of these endeavors *not* as education for the gifted and talented—with the implication that we can and should identify particular individuals on whom we will expend unique educational resources—but instead as education for gifts and talents—with an emphasis on encouraging students' expression of and experimentation with their special aptitudes across the board. Furthermore since such educational programs are open to all, they will naturally serve the special educational needs of the precocious in a way that is less morally problematic than selective programs aimed specifically at this group of children.

Mr. Bull's concluding comments are of value:

Thus, for want of a better description, disciplinary and disciplined participation in our forms of life rather than fragmented and generalized acquaintance is likely to produce the skills required for changing our civilization in revolutionary and productive ways. Indeed, one of the common complaints of the eminent about their schooling has been its dilettantish and undisciplined approach to what is taught.

Second, we know that cultural advancement often requires unexpected combinations of insight and skill. Thus not only must common subjects be studied in a way consistent with a mature disciplinary understanding of them, they ought therefore to be relatively diverse.

Third, the advancement of our culture often stems from an application of what might be called metaphysical views to our existing forms of life—again Einstein provides a clear example, for his view that the mechanisms by which nature operates are unitary is just such a metaphysical belief.

This reference to Albert Einstein gives reason to recall a passage in James Marshall's *The Devil in the Classroom* (quoted in MANAS for last Nov. 13):

Einstein was dropped from his *Gymnasium* in Munich because the school felt his attitude to be negative and to have caused other students to be disrespectful toward their teachers. He applied for admittance to the Polytechnic Institute in Zurich and failed to pass the entrance examination in mathematics. When finally admitted he did not do well. In an autobiographical note he said:

"The hitch in this was, of course, the fact that one had to cram all this stuff into one's mind for the examinations whether one liked it or not. This coercion had such a deterring [upon me] that, after I had passed the final examination, I found consideration of any scientific problems distasteful for me for an entire year. . . . It is, in fact, nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wreck and ruin without fail."

Teaching which preserves by sharing in holy curiosity is probably a rarity in any kind of school except possibly kindergarten. Mr. Bull's expectation that his program of education "for gifts and talents" instead of supposed gifted and talented individuals would require "a substantial restructuring of school programs and priorities" seems understated. His reasoning is sound enough, but the vast school system of which he speaks is hardly susceptible to the kind of changes he proposes. One need turn only to the article by Walter Karp in *Harper's* for last June—a review of eight books on the elementary and secondary schools of the United States—to recognize that there is little or no hope of introducing such changes—obtaining, that is, "a rigorous common curriculum for all students."

FRONTIERS

A Striking Contrast

THE International Council of Scientific Unions is a worldwide consortium of scientific organizations believed able to speak for all scientists. It has a committee known as SCOPE (Scientific Committee on Problems of the Environment) that has recently published a study, "Environmental Consequences of Nuclear War" (ENUWAR), in two volumes. In *Environment* for last October, Carl Sagan, who teaches astronomy at Cornell University, reports on this study. The first volume is concerned with atmospheric effects, the second with biological effects. While there are discussions of the direct effects of nuclear detonations, much of the research is focused on what may happen to the climates of the world. Mr. Sagan gives the following account of the meaning of "nuclear winter," an expression now commonly used:

> Winter is the time when, over the entire hemisphere and for a significant period of time, it is darker and colder than on the average. Ordinary winter is due to the Earth's revolution about the Sun and the tilt of its axis of rotation. Nuclear winter has a different cause—fine obscuring particles injected into the atmosphere by nuclear war—but the phenomenon is similar, although it may be more (or less) severe. The advantage of the term as an overall description is that ordinary people can understand what is being talked about, in contrast to such circumlocutions as "anomalous climatological sequelae of nuclear war." The very apt phrase, nuclear winter coined by Richard P. Turco, combines accuracy with clarity and should be retained.

The study gave attention to the effects of nuclear winter on the countries in several continents which produce major food supplies for the world, noting that "the populations of Africa, Asia, and South America are especially vulnerable to starvation in nuclear winter," and adding:

> Even though most of the countries of these continents have no nuclear weapons and are not likely to be targeted, the human consequences of a major nuclear war could be nearly as severe as in the principal combatant countries.

Carl Sagan explains why:

> The so-called Little Ice Age, from the late sixteenth to the late seventeenth century, seems to have produced only a 1° C reduction in average summer temperatures according to the report; but this was enough to truncate the growing season in Europe by almost a month and to cause significant declines in grain yield, which in some regions were linked to starvation and epidemics. An average temperature decline that seems small—a few centigrade degrees, say—when averaged over large areas can nevertheless be catastrophic because of fluctuations from the mean.
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> As the average temperature approaches the freezing point, the probability that some days will be below freezing increases and, as we know from the destruction of citrus crops by short periods of unexpected freezing weather, such low temperature fluctuations can be disastrous for agriculture. An average temperature decline of more than 3° C—well within the nuclear winter projections—"is essentially unprecedented within the historical record," the report states, and would be catastrophic.
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> For Canadian wheat, a 2° C temperature drop hardly affects wheat production, nor does a 3° C drop for barley. But a 1° C of further cooling and both crops are destroyed. The agricultural response to falling temperatures, diminished light levels, and other environmental consequences of nuclear war is starkly nonlinear. The study emphasizes that, even with no climatic perturbations, nuclear war would be catastrophic for Northern Hemisphere agriculture because of the breakdown of society and the near elimination of agricultural subsidies . . . .
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> Because subsistence is so marginal in so many parts of the world, even a small decline in available food—10 per cent, say—can lead to massive starvation. Some other nations, not now in subsistence economies, are dependent on food from outside. If food imports into Japan, for example, were to cease, there would be enough food for half the Japanese population, and the starvation rate might be much more than half. The realities would be even worse: this projection is for the unlikely circumstance that Japanese agriculture continues undisturbed in the post-war nuclear environment.

Carl Sagan concludes his review by quoting a single sentence from the report:

> A fundamentally different picture of global suffering among peoples in non-combatant and

> combatant countries alike must become the new standard perception for decision-makers throughout the world if the visions portrayed in this study are to remain just intellectual exercises and not the irreversible future of humanity.

The fourth 1985 issue of *The Ecologist*—which comes out six times a year—has an article by Donald J. Clark on what he calls "the other Japan," which remains largely invisible yet is slowly gathering strength. Typical of its interests are the people of Zushi, a small town near Tokyo, who recently forced the resignation of the mayor and elected their own man, because the former had agreed that a 290 hectare green forest, owned by the Japanese government, and once the site of an ammunition depot used by the U.S. Navy, should be turned over to the Navy as housing for its personnel. The people of Zushi objected, since the forest was itself beautiful, and the home of numerous birds and animals, "an unusual natural asset in the heavily developed area south of Yokohama."

The emergence of this "other Japan" has been a surprise to almost everyone. The people embodying this traditional spirit of the Japanese do not seek publicity. They are in no way political, indifferent to "causes," far more concerned about personal health and well-being than they are "about the fragility of the global food base." Yet they are now organizing to protect what they believe in.

A group in Kyushu has formed the Western Japan Waterwheel Association, to keep going a number of waterwheels to grind grain in their area. Nearby a cooperative association links organic farming with health-conscious food consumption. There are similar producer-consumer organizations all over the country. In the countryside outside Nagoya a chicken farmer in 1953 organized a commune which now has 1200 members devoted to supplying organically raised foods to people who want it. A mountain village has a group who maintain rice paddies on terraces and offer help to people who want to move there, where the water is pure. There are, Clark says, hundreds of such groups throughout Japan, "mostly small and mostly poor," but committed and active. These people believe in organic food, traditional medicine, renewable energy, simplified living, and care of the environment. So, as Donald Clark puts it:

> The brash, competitive and often offensive "official" face of Japan is what the world sees and recognizes. To ecologists, this Japan is the enemy. But behind the stunningly successful political-industrial complex and its continuous violations of both nature and humanity, there is a profoundly ecological Japan whose foundations are secure and whose wisdom permeates even the strongholds of aggressive modernity. It's stubborn continuity surprises even the Japanese.