TWO NOT POPULAR IDEAS

NON-VIOLENCE is not a word that charms us with poetic resonance. It is a prosy word that engages our attention by weight of the logic of recent history. In these late years of the twentieth century, the mindless track of war, crisscrossing again and again the paths of everyday life all over the world, has given violence a terrifying monotony. Time was when humans made war with a decent reluctance. Now they seem to leap to the absolute of violence with impatient contempt for any other means.

Non-violence, then, while not emotionally attractive, is something we must come to. We must come to it even though it lacks romance. Gandhi was a heroic man—no doubt of that—but we are a long way from making him a folk hero. This may be possible in India, where reverence for *rishis* has never been lost, but in the West, except for the morally precocious few, Gandhi's thinking makes its way through intellectual crevices blasted open by the almost continuous explosions of war. To appreciate Gandhi in terms of his vision and full humanity, our conception of the heroic will have to change, and this is more than a matter of reasoned revision of attitudes and values.

But it may be misleading to set the situation in this way. The very idea of the hero seems an anachronism in our society. For a generation or more, our literature has honored only anti-heroes. We understand the idea of man-as-victim much better than man as hero-with-a-thousand-faces. Our writers compose no epics these days, doubtless because they can't. Hero-worship is now unnamable and clandestine, in the sense that it continues in everyday practice, but without cultural sanction. It is ignored as a normal trait of character because it has no place in the prevailing theory of human nature, and social theory has expurgated the idea because it offends against practically every rule of mass morality. Yet from childhood we have all had our heroes, simply because it is natural to identify with achievement, derring-do, and style. As we mature, we learn to admire other qualities, but the influence of exemplary individuals is evidence enough of a reality in the formation of character that has been systematically neglected. In other, older societies, tales of the hero were the foundation of education, shaping tradition and defining ideals. We imagine we have outgrown all that, when the fact may be that we have done no more than impoverish our moral and cultural life.

In *Meditations on Quixote*, Ortega illustrates this decline by showing what happens to the novel when it is divorced from its epic parentage:

Madame Bovary is a Don Quixote in skirts with a minimum of tragedy in her soul. She is a reader of romantic novels and a representative of the bourgeois ideals which have hovered over Europe for half a century. (Ortega wrote this in 1914.] Wretched ideals! Bourgeois democracy, positivist romanticism.

The ideal of the nineteenth century was realism. "Facts, only facts," clamors a Dickensian character in *Hard Times*. The how, not the why; the fact, not the idea, preaches Auguste Comte. Madame Bovary breathes the same air as M. Homais—a Comtist atmosphere. Flaubert reads *La Philosophie Positive* while he is writing his novel....

The natural sciences based on determinism conquered the field of biology during the first decades of the nineteenth century. Darwin believed he had succeeded in imprisoning life—our last hope—within physical necessity. Life is reduced to mere matter, physiology to mechanics. The human organism, which seemed an independent unit, capable of acting by itself, is placed in its physical environment like a figure in a tapestry. It is no longer the organism which moves but the environment which is moving through it. Our actions are no more than reactions. There is no freedom, no originality. To live is to adapt oneself; to adapt oneself is to allow the material environment to penetrate into us, to drive us out of ourselves. Adaptation is submission and renunciation. Darwin sweeps heroes off the face of the earth..

The hour of "roman experimental" arrives. Zola does not learn his poetry either from Homer or Shakespeare but from Claude Bernard. The subject matter is always man, but since man is no longer the agent of his acts but is moved by the environment in which he lives, the novel will look for the representation of the environment. The environment is the only protagonist.

nineteenth century, So. in the the Environment replaces Jehovah, but since science has no room for Jehovah—"I have managed without that hypothesis," Laplace told Napoleon-it became necessary for man to assume "creative" tasks. Thus the Marxists determined to remake the environment. A proper social environment would move men in the right direction. with Pavlovian behaviorism the reconditioning science. Individual human will became an offense against the Proletariat Stateonly the refashioned environment could give scientifically validated guidance. The inherited and largely dishonored moral traditions of the West were all to be abandoned. Marx, Isaiah Berlin observed, "sought to obliterate all references to eternal justice, the equality of man, the rights of individuals or nations, the liberty of conscience, the fight for civilization, and other such phrases which were the stock in trade . . . of the democratic movements of his time; he looked upon these as so much worthless cant, indicating confusion of thought and ineffectiveness in action."

How could such contentions become so enormously popular? In *Personal Knowledge* Michael Polanyi suggests that "it is not in *spite of* this contempt for justice, equality and liberty, but *because of* it that Soviet Russia is accepted by many as the true champion of these same ideals in the fight against the very nations openly professing them." In a well-measured attempt at explanation, Polanyi says:

Why should so contradictory a doctrine carry such supreme convincing power? The answer is, I

believe, that it enables the modern mind, tortured by moral self-doubt, to indulge its moral passions in terms which also satisfy its passion for ruthless objectivity. Marxism, through its philosophy of materialism," conjures "dialectical away the contradiction between the high moral dynamism of our age and the stern critical passion which demands that we see human affairs objectively, i.e., as a mechanistic process in the Laplacean manner. These antinomies, which make the liberal mind stagger and fumble, are the joy and strength of Marxism; for the more inordinate our moral aspirations and the more completely amoral our objectivist outlook, the more powerful is a combination in which these contradictory principles mutually reinforce each other.

Polanyi's brief psychological analysis of how this combination works seems accurate enough:

You are filled with a passionate desire to see the workers overthrow Capitalism and establish a realm of liberty, justice and brotherhood. But you cannot demand this in the name of liberty, justice and brotherhood, for you despise such emotional phrases. So you must convert Socialism from a Utopia into a Science. You do so by affirming that the appropriation of the means of production by "the proletariat" will release a new flow of wealth now entrammeled by Capitalism. This affirmation satisfies the moral aspirations of Socialism, and is accepted therefore as a scientific truth by those filled with these aspirations. Moral passions are thereby cast in the form of a scientific affirmation. By covering them with a scientific disguise it protects moral sentiments against being deprecated as mere emotionalism and gives them at the same time a sense of scientific certainty; while on the other hand it impregnates material ends with the fervour of moral passions.

We have come a long way indeed from the old idea of the valiant hero as the model for human aspiration! This was, perhaps, a necessary break with the past, by reason of its endless hypocrisies and the arrogant rationalizations which justified the power retained by those born to wealth or blooded status, but the cost in terms of how people think about themselves has never been estimated. For long generations there has been no *human* ideal, but only a *social* ideal, a collectivist goal without coherent analogue in

individual humans. All this has had a blighting effect on literature, while dehumanizing the various social sciences. Morality became inferential—it is good to do what will fit in with a theoretically "good" society. There are no longer ordered conceptions of the good human being, who has become a cog in the complicated social machine. It may be either a free enterprise machine or a state capitalist machine, but in either case the health of the system defines the good man.

But this, fortunately and at last, is a track of belief we are leaving. The famous "objectivity" of science is known to be a fraud. The Baconian slogan, Knowledge is Power, no longer beguiles us into supposing that ruthless exploitation of the planet is what nature intended us to do, and we are slowly becoming aware of the obligations which go with our impressive technical capacities. The Capitalist and Statist moralities are now declining faiths, and we are under the urgent necessity of having to generate a new vocabulary of morals.

For a great many, Ecology is the key word. Except for psychology, ecology is the only science with an implicit moral foundation. After all, ecology is a study of the interdependencies of all forms of life—a discipline which includes the whole planet and beyond. The rebirth of psychology as moral science came a little earlier with the work of A. H. Maslow, who was the first in modern times to give fresh or even "scientific" definition to the virtuous man—he is *selfactualizing*.

In short, the idea of the hero can be suppressed for a while, but not permanently. Attempts to frustrate nature must eventually fail. When things go wrong, whether in everyday life or in scientific or technological systems, we go back into ourselves to find new axioms or starting-points. We consult nature in ourselves, and consider ourselves in nature, to locate true or better ideas about how to think and what to do. These acts of self-reference inaugurate decisive cycles of change. The conception of the hero may now acquire new life and form, since the ideological reason for rejecting it has become powerless, and only the acquired reflexes induced by mechanistic and mass morality remain.

How would one recognize a hero, should we be fortunate enough to have one or two among us? Ortega gives a useful account of the hero's qualities, beginning with the characteristic obstacles which stand in his way. There are, he says "a host of plebeian instincts [which] swarm around the rudimentary hero that we carry within us."

For sufficient reasons, no doubt, we usually cherish a great distrust towards anyone who wants to start new ways. We do not demand justification from those who do not try to step off the beaten track, but we demand it peremptorily from the bold man who does. Our plebeian self hates few things more than an ambitious person, and the hero, of course, begins by being ambitious. Vulgarity does not irritate us as much as pretentiousness. Hence the hero is always only a few inches from falling not into misfortune, for this would be rising to it, but into ridicule. The saying from the sublime to the ridiculous" formulates this danger which really threatens the hero. Alas for him if he does not justify by an exuberance of greatness, by superlative qualities, his claim not to be like the rest of us, "the run of the mill"! The reformer, the one who attempts a new art, a new science, new politics, spends his lifetime in a hostile, corrosive environment, which supposes him to be a conceited fellow, if not a fraud. . . .

Since the character of the heroic lies in the will to be what one is not yet, half of the figure of the tragic protagonist is outside of reality. . . . The hero anticipates the future and appeals to it. His gestures have a utopian significance. He does not say that he is but that he wants to be. . . . As something made to live in a future world, the ideal, when it is drawn back and frozen in the present, does not succeed in satisfying the most trivial functions of existence; and so people laugh. People watch the fall of the ideal bird as it flies over the vapor of stagnant water and they laugh. It is a useful laughter: for each hero whom it hits, it crushes a hundred frauds.

Ortega draws a literary moral:

Consequently, comedy lives on tragedy as the novel does on the epic. Comedy was born historically in Greece as a reaction against the tragic poets and the philosophers who wanted to introduce new gods and set up new customs. In the name of popular religion, of "our forefathers," and of sacred customs. Aristophanes puts on the stage the actual figures of Socrates and Euripides, and what the former put into his philosophy and the latter into his verses, Aristophanes puts in the persons of Socrates and Euripides.

Comedy is the literary genre of the conservative parties. The distance between the tragic and the comic is the same as that which exists between wishing to be and believing that one already is. This is the step from the sublime to the ridiculous. The transference of the heroic character from the plane of will to that of perception causes the involution of tragedy, its disintegration—and makes comedy of it. The mirage appears as nothing but a mirage.

So it is today. The leaders of the ecology back-to-the-landers. movement. the the environmentalists. and the champions of alternative forms of energy are mocked as doomsayers, aging hippies, "preservationists," and utopian dreamers by the conservative parties. But their day of emergence as heroes will come, as anyone can see. Then they will be subjected to trials of another sort.

The ordeals of the authentic hero never end. Only in stories is there a final victory. Perhaps we should not speak of them as heroes, which heaps upon their shoulders mythic responsibilities. It is sometimes hard to tell whether the ancient Greeks thought of their heroes as men or gods. But the fact of the part played by heroic striving in human affairs is essential to any understanding of history. It is no minor irony that the Communists owe their beginnings to a band of heroes who are well described by Max Eastman in his book (1925) on the youth of Leon Trotsky:

A wonderful generation of men and women was born to fulfill the revolution in Russia. You may be traveling in any remote part of that country, and you will see some quiet, strong, exquisite face in your omnibus or your railroad car—a middle-aged man with white, philosophic forehead and soft brown beard, or an elderly woman with sharply arching eyebrows and a stern motherliness about her mouth, or perhaps a middle-aged man, or a younger woman who is still sensuously beautiful, but carries herself as though she had walked up to a cannon-you will inquire, and you will find out that they are the "old Reared in the tradition of the party workers." Terrorist movement, a stern and sublime heritage of martyr-faith, taught in infancy to love mankind, and to think without sentimentality, and to be masters of themselves, and to admit death into their company, they learned in youth a new thing-to think practically; and they were tempered in the fires of jail and exile. They became almost a noble order, a selected stock of men and women who could be relied upon to be heroic, like a Knight of the Round Table or a Samurai, but with the patents of their nobility in the future, not the past.

There are structures of this sort—hierarchical structures—which give form to every society. In young societies they may be authentically representative. If the vision is faulty, so will be the growth. In declining cultures they are made by leaders like the ward politicians Lincoln Steffens wrote about in his autobiography. Steffens told a retired Philadelphia politician how their system worked:

"Political corruption," I went on, "is, then, a process. It is not a temporary evil, not an accidental wickedness, not a passing symptom of the youth of a people. It is a natural process by which a democracy is made gradually over into a plutocracy. . . . If this process goes on, then this American republic of ours will be a government that represents the organized evils of a privileged class."

Some time later the same politician asked what was his "real sin." Steffens told him disloyalty.

He was shocked and incredulous. Since he held that loyalty was his chief and perhaps his one virtue, since he had never gone back on his friends, and whatever else he had done, which was a-plenty since he had been always a true, square friend, my charge was totally unexpected and hardly believable. And my argument, as it gradually convinced him, was devastating. He was a born leader of the common people, I reasoned; he had taught them to like and trust him, even with their votes; he had gathered up and organized the power which lay in their ballots, their trust and loyalty to him; and he, good fellow, had taken his neighbors' faith and sovereignty and turned it into franchises and other grants of the common wealth, which he and his gang had sold to rich business men and other enemies of the people. He was a traitor to his own. He had asked for it straight, I gave it to him—straight, and he got it. Not one word of evasion or excuse. He took it lying down, and all he said after a long, wan silence was: "Say, I sure ought to go to hell for that, and what'll they do to me? Do you think they'll set me on fire for—for what you said—disloyalty?"

Steffens understood the organic character of social process—good, bad, indifferent—and in a way preferred the crooked politicians he was exposing to the impractical reformers who had no idea how societies actually work. He knew it was the quality of men that counted, more than anything else.

These are days of rapid change, and of the slow resolution of major contradictions. We dislike the idea of heroes as ideal humans, and of hierarchy in the social structure. Yet societies prosper when heroic individuals are models for the young, and when hierarchy is informed by the quality of *noblesse oblige*, as it was in the early days of this republic. Hierarchy is a law of nature and it operates in every social formation this side of totalitarian rule. The revolutions of the eighteenth century abandoned hierarchical forms for sound historical reasons we are all familiar with, and not until Gandhi presented the world with non-violence as a social principle was it possible to consider the function of hierarchy as something both natural and good. The superior man-the Satyagrahi, according to Gandhirejects power over other people. A Gandhian society, one could say, would be structured by an aristocracy of character-of individuals for whom self-interest no longer exists. There are such people, but they are hard to find.

REVIEW ART WITHOUT RULES

THE Autumn (1979) issue of the Virginia Quarterly Review presents an article on "nonrepresentational art" which may do yeoman service for a number of readers. Conducting his inquiry at a level considerably above the influence of cultural fashions, Oscar Mandel gives rational ground to the intuitive responses of many people to "abstract art," showing why the time has come to recover from the worshipful attitudes which some have felt obliged to adopt. But before Mandel. auoting Mr. some background considerations need attention.

Initially, an artist is one who stirs delight by his capacity to show us a form that is familiar-a scene we know or a face we are charmed by-yet different from the original. The artist adds a symmetry of his own, abstracting in a way that makes some sort of statement. Brief *haiku* verses—a literary form we have borrowed from the East-produce this effect. The artist has his "mystery" which gives pleasure to the spectator. The great artist uses or evolves symbols of evocative power. His work is a persuasive reference to something "beyond." He is a natural teacher—an unconscious teacher, one might say. He takes nothing away from us by trying to tell us something. Instead of instructing, he celebrates. His work has a hallowing presence, becoming a secular scripture.

This makes it easy to understand why, with the decline of faith in institutional religion—for many, there seems to be no other—the artists acquired the status of priests. Since artists are articulate—in words, in line, color, and plastic forms—they come to represent far-reaching cultural transitions. The whole "modern" movement—away from discredited authority and sterile tradition—seems most easily identified by the changes in the work and role of the artist. In the East, art has always been the handmaiden of religion. It is a civilizing grace that gives the world of the senses a reflection of the higher longings of mankind. While the East has had its Reformations—the mission of the Buddha was a break with the established religion of India, as a renewal of its original meaning—no separation of art from transcendental inspiration has occurred there. The West's reforms have been more violent, perhaps because the decline of Western religion has been more overt, more openly outrageous in its tyrannies, thus more offensive to the human spirit.

In any event, with the Renaissance the angels of religion became billowy peasant girls, a Wagnerian earthiness declaring the rediscovery of man on earth. A proud and not inglorious thisworldism attended the Enlightenment. But then, as Nietzsche declared, this world is not enough. Particularism in art eventually palls. Humans long for intimation of invisibles. The artists, as Ortega suggests in Dehumanization of Art, began to tire of the soft round flesh of the Renaissance. Let us paint light, they (the Impressionists) said, or structure (as with the Cubists). Wanting a still more independent expression, others said they would show how they *feel* about an object, and then still others said there was no need to bother with an object at all. This of course is too simple an account of changes occupying centuries, yet it is fair to say that when tradition-makers lose touch with past tradition, they make up their own little "traditions" (which soon become fashions) as they go along, and the result-except for the few who have within themselves the wholeness and justification of genius-is a jangling carnival of rapidly succeeding sects. As A. Alvarez wrote back in the 60s:

Certainly, for the past forty years or more, the history of the arts could be written in terms of the continual and continually accelerating change from one style to another. The machinery of communications and publicity is now so efficient that we go through styles in the arts as quickly as we go through socks; so quickly, in fact, that there seem no longer any real styles at all. Instead there are fashions, idiosyncrasies, group mannerisms and obsessions. But all these are different from genuine style, which in the past has always been an expression of a certain fundamental coherence, an agreement about the ways random experience can be made sense of.

A more recent comment on modern art is by Victor Weisskopf, a physicist, who said in the Autumn *American Scholar:*

It reflects a frantic search for some kind of meaning by trying to go in many hitherto untried directions. We observe an outburst of new ways and forms of expression. From time to time, indeed, something really great and beautiful is created but, more often than not, what we see are the results of wild experimentation for the sake of being different from what has been done before. Perhaps this frantic search is a symptom of lack of sense and meaning. Perhaps it is a method to arrive at a meaning.

Is there something essential missing from modern or abstract art? Not from all of it, perhaps, since there are sometimes artists who make you throw away the book and gaze in humbled awe—but from the bulk of modern work? In his *Virginia Quarterly Review* article, Oscar Mandel sets out to answer this question. Speaking of the present dominance of "nonrepresentational art," he says:

Historians of later ages, whether they choose to call it a cumulation or an aberration, will certainly pick it as the most *distinctive* manifestation of artistic life in our century. Nevertheless, the ideology of abstract art continues to be challenged. Dissident artists attack it most effectively by working under other standards. Those of us who merely reflect help as best we can with theoretical considerations—one or two of which I submit in what follows.

To impeach nonrepresentational art, the gravest charge against it must be its failure to engage what I shall deliberately and even ostentatiously call the moral interest. For the best part of a century, intellectuals have been speaking, writing, and acting as if their sophisticated aesthetic perceptions were quite uninfluenced by moral considerations, and as if moral considerations were a sort of mental function suitable only for right-wing patriots. But have we not now travelled far enough from the 19th century to take the ineradicable realities of our moral life—the moral life even of a disabused art critic—back into the aesthetic arena? Modern criticism has closed its eyes to the moral element in our aesthetic response because so few serious works of art offend the moral persuasions of modern critics. If we were flooded with ambitious art-works (pictorial or literary) favoring the Ku Klux Klan, the Nazi revival, a return to fundamentalist Christianity, or even laissez-faire capitalism, most of our critics would instantly show their true colors clamber down from their cool critical summits (is not "cool" the proper word for modern criticism today?) and man the barricades of Moral Passion. In short, whether we know it or not, overtly or covertly, we are always moralizing, moralizing in life, and moralizing in art, even when we think we are responding only to masses, rhythms, and colors.

The attempt to suppress "the moral" is of course a part of the influence of scientism, evident in so many ways throughout our culture. To speak of "moral" responsibility, until quite recently, has been to date oneself as thinking the way people used to think a century or so ago. The Marxists, for example, contend that "morals" are epiphenomena produced by the prevailing economic processes. This shows that Marxism is scientific and *right*, while the suppressed moral burst forth in the passion for instincts expropriating the expropriators. It is moral to be "on the side of history." The struggle to restore feelings of moral integrity through the evolution of a new language of right and wrong-wholly independent of rejected religious cliches-is still one of the hidden dramas of our time. Meanwhile there are paradoxes in the thinking about the arts:

Not all abstract painters, and not all their learned apologists, accept the judgment that nonrepresentational art is empty of moral interest. After a few sarcasms aimed at "what people are pleased to call objective reality," at "the oppression of the subject," "the figurative obsessions," "the dead weight of the object," many modern artists will tell us that they are committed to history and ethics. Their three patches of round items on a background of squirms merely avoid "outward appearance" to dwell on "the underlying significance of reality." This is sometimes capped by an allusion to modern physics, which is supposed to have demonstrated that a chair no longer looks like a chair.

The titles of abstract works both puzzle and amuse Mr. Mandel. He gives a few instances that destroy the sobriety of the matter, then says: A painting by Robert Motherwell (I take these examples at random) which ought to be called "Oval and longitudinal black shapes against strips of various colors" wins from his generous pen the title, *Elegy to the Spanish Republic*. One critic goes so far as to speak of "the tragic implications of reds and greens which jar on one another" in the work of Franz Kline. Mr. Motherwell, by the way, is quoted as saying that "without ethical consciousness a painter is only a decorator." If, however, lines, colors, and surfaces express ethical consciousness, then there is nothing in this world that does not, and we might as well give up speech for burps.

This irreverence is certainly appropriate, and for some it will be emancipating. How, then, can an artist establish that he should be taken seriously? Well, the fact is that no rule can now be given. That was a question for the Academy to answer, and the Academy no longer exists.

COMMENTARY THE CONFUSIONS OF CHANGE

IT is evident from the material in this week's issue that the Western World is badly confused about all questions having to do with right and wrong. The emotional effect of the scientific revolution was that we felt greatly relieved that we no longer needed to worry ourselves with moral questions. Objective research would settle all such matters. The irking guilts produced by conscience could be set aside as groundless and irrelevant in the modern age. Social justice would be taken care of by spread of the prosperity that would result from the application of science in technology and industry. What philosophers and moralists objected to as hedonism was redefined as the natural fulfillment of biological drives. Scientific management would take care of economic problems and scientific medicine would eliminate disease.

The obvious failure of these expectations has had various consequences. Since we don't talk about our "religion," these days, but about our "value systems," it is pointed out that the "values" of Western civilization—of hedonistic, technical culture—don't apply to large areas of the world. They made conditions worse, not better, as Prof. Reddy points out. (See Frontiers.)

Another result of the progressive breakdown of existing institutions has been growing antagonism toward science—an attitude now so widespread that the organization of scientists holds meetings to consider the possibility of hiring some public relations experts to improve the "image" of the profession. Concurrently there has been a religious revival of sorts—often a noticeably emotional return to the kind of religion which the scientific spirit found so intellectually weak and scientifically untenable. Meanwhile, the tendencies of mind engendered by industrial progress and comparative prosperity have not changed very much, since they are only habits, not the new ideas that are gradually spreading around. The resulting confusion is really disastrous because it gets in the way of any deliberated and constructive change. The thing to do, almost certainly, is to investigate the religion which existed before systems of belief became organized institutions armed with techniques of thought control and temporal power, and to recover once again the original motives of the scientists who made their discoveries with reverence for the wonders of nature, and persisted in their work from a love of truth.

CHILDREN ... and Ourselves WHY DID WE FORGET ALL THIS?

FOR two years now, John Holt has been editing (and writing) *Growth Without Schooling*, a paper which comes out every two months. The title means just what it says—dissociating normal and fruitful growth from going to school. Not many parents are able or ready to take their children out of school and teach them at home, but *some* are, and more and more are doing it. Holt publishes to help those who want to try; he gives them reasons which probably confirm and enlarge on their own impressions, and he inspires confidence in parents who are uncertain as to whether they are able to do as well or better than the existing schools. Of course, you can do it! he tells them. You're human, aren't you?

A lot of what goes into his paper is on how bad the schools are. There can be little argument about this. Yet there are parents who feel nothing but gratitude to a rare teacher their children have been lucky enough to encounter, and sometimes a principal or an administrator becomes a loved and admired member of the community. But this is not really a reason for ignoring the work of John Holt. Whether or not one is ready to take a child out of school, there are discoveries being made by the parents who do, and what they find out is nearly always worth repeating.

A few years ago Wendell Berry wrote a book called *The Hidden Wound*, about the harm done to black and white people in the South. Briefly, the visible wound is what the whites did to blacks during the epoch of slavery and after. The hidden wound is what the whites did to themselves by using the blacks to take care of the dirty work— "nigger work," they call it down there. They cut themselves off from the earth. They lost touch with the fields and the sky and the weather. While mutilating their lives they developed an artificial egotism because they no longer worked the land themselves—they thought this a distinction and a virtue. They imagined themselves to be "superior," and devised institutions to confirm this delusion and to impose it on their children. And so on.

There is something of a parallel between this epoch-making distortion of human nature and what happens when people delegate the education and much of the rearing of their children to schools. "Well, we have to do it," the parents say. "We both work." Or, "I've forgotten all the geography and most of the arithmetic I ever knew." And so on. And it's true enough. It would make an interesting research project to go back in social history, century by century, and to list the vital competences which we-in this age of progress and enlightenment-have lost almost completely. We can't grow our own food, we can't make our own clothes, we can't build our own houses, or heat them after they're built. What is "progressive" about making these needs dependent on the political process?

Having schools is a comparatively recent innovation as a "mass" phenomenon. Until the industrial revolution separated human life from the activities of self-support, humans were extraordinarily versatile. One can say, of course, that now we have time for better things, but if you read the papers you are likely to wonder what they are.

Or, with a familiar air of finality, you could say that "we can't go back to the past," which is true enough but irrelevant. A good human life *uses* the past. Shallow preoccupations make inaccessible values we all once enjoyed, and study of the past shows how and why. What we do to recover the values is a contemporary question, calling for invention in the present. The past remains, however, a rich inventory of illustrations, often enabling us to recognize both obvious and subtle forms of self-deprivation.

Holt's concern is for the welfare of children. This is evident on every page of his books. Judging from what we read in *Growth Without Schooling*, the young come out ahead when their minds are helped to grow up at home. The paper is filled with success stories. The only trouble with this is that the children seem quite extraordinary, not the same as the ones we have. Maybe it's because they are taught at home, or maybe it's because of their spunky parents, or maybe it's the strong presence of an "X" factor that can't be explained. Who knows about these things? From a social point of view, one could say that the intent of Holt's paper is to cut our educational institutions down to size. They are obviously too big, too powerful, and too crowded. They are meant to serve the young, not boss them around. If you assign an institution a job that is really impossible for any organization to perform, then the institution has to become some kind of monster just to make the attempt. The failures grow very elaborate. The need for "expertise" gets out of hand. So much for the case against schools.

The case *for* schools is obvious enough. Knowledge and wisdom are scarce. You can't buy them, although they can be given away. The only real excuse for a school is that the village or town or city needs a place for providing rare knowledge and wisdom with an identifiable focus—a focus not of what every parent is better able to give the children, but of what is beyond the natural resources of the parental role. This may be an art or a science. A school, you could say—speaking ideally—is out of line whenever it presumes to teach a child what he can learn more naturally at home. Holt's paper affords a radical perspective on these questions. Involved, of course, is a radical transformation of the home.

Something should be said about the enrichment of the lives of parents who teach their children. It seems best to quote from them. The pages of *Growth Without Schooling* remind you of a testimonial meeting where people get up, one after the other, to tell how they have been "saved," except that in this case you aren't embarrassed by confessional display but mainly impressed and delighted by wonderful anecdotes and reports of discovery. Here is one report by a Massachusetts parent:

We have found that our children learn most readily and with retention when they have a need to know something and an opportunity to assimilate in experience what they have learned through their own initiative. One example was our daughter Celia's difficulty learning to write cursively. Despite daily attempts, little progress was made. We discontinued the writing lessons for a period of time until Celia asked us to help her learn cursive again. This time, with her own initiative as the key factor, her progress was rapid. As another example, Celia did not seem to recall the various ways of telling time when working in her arithmetic workbook. Her interest in the exercises was minimal. On her birthday, however, she received a watch as a present, and the next day was able to recite the time accurately and with no difficulty at all. Similarly, a page of arithmetic problems holds little appeal to Celia, yet when working out a purchase, budgeting her allowance, keeping track of a game score, or measuring an object to construct her interest is high. Celia especially looks forward to selling berries next summer that she is helping to grow in our garden and handling the cash flow herself. The practical application of arithmetic in her life stimulates her toward achievement.

Now comes a critical comment:

It is the close and continuing relationship we have with our children which enables us to observe their growth in skills and comprehension without the use of standardized, routine testing. . . . Although quantitative testing may be the most practical method of charting students' progress in school where a high teacher-student ratio exists, it is not necessary in our own situation.

A tremendous amount of confusion shadows the issues of competency and accountability, all pointing to the difficulties of measuring a child's needs and development in a system of mass education. New standardized tests are being devised to determine at a late stage in a child's school years what his classroom teachers would be able to ascertain at every grade level if more individualized attention were possible. .

It is the objectives of testing, however, with which we primarily disagree. Because of the administrative difficulties of mass education and its underlying assumption that children must be taught

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something in order to learn it, it is deemed necessary that by a certain age a certain body of knowledge must have been accumulated. This premise denies individual differences between people, the fact that many children are not ready to learn certain things by a certain age, and that children have the capacity to learn independently. The fact that a child does not know a particular math skill or history date by age 7 or 8 does not mean that he or she will never know it. Conversely, that a child does know that skill or date at age 7 or 8 does not mean that he or she will retain that knowledge into adulthood. Indeed, when a child is especially motivated to learn something, the material that would normally take years to cover repetitiously in public or private schools can be assimilated in a matter of days or hours.

Why did we let ourselves forget all this?

How much of our lives—as both child and grown-up—has been taken up by having to adapt and fit into the elaborate systems now necessary to a large range of unhealthy and abnormal circumstances and relationships? John Holt's paper obliges attention to these usually embarrassing questions. (*Growth Without Schooling* is \$10 a year—308 Boylston Street, Boston, Mass. 02116.)

FRONTIERS Light in the East

SIX years ago, Amulya K. N. Reddy, an electrochemist of the Indian Institute of Science in Bangalore, India, altered the direction of his work. He told a writer for *Science* (Constance Holden, in *Science* for Jan. 11): "I began to feel increasingly the irrelevance of what I was doing." He turned his energies to development of appropriate rural technology to benefit Indian villagers, and has completed a design for a rural energy system for the village of Pura—a biogas plant to operate on cattle wastes.

Conventional development economists stress rural electrification, but Reddy points out that this is of no use for village cooking. His plan is to make the local economy more efficient, not copy the West. The *Science* writer gives his present thinking:

In Reddy's view, planning for appropriate rural technology requires shedding the value system implicit in Western technology. "The value systems of science in developing countries are such that all foci of interests, all criteria and fashions are based on what the scientific establishment in the advanced countries believes in. Everyone is looking westward. More than money, equipment, or infrastructure, it is that value system which is the real obstacle to scientists looking at their own problems," he says.

The technology produced within that value system fails the basic criterion of appropriate technology—that it must address the area of greatest need, must promote self-reliance on the part of those for whom it is designed, and must be environmentally sound.

Reddy has formed a project—ASTRA (Application of Science and Technology to Rural Areas)—which stresses understanding of local needs and conditions and the importance of selfreliance among the villagers. To well-intentioned Westerners who want to collaborate with ASTRA, he says: "The cultural overhang of colonialism is such that if there is an institutional collaboration, any credit for achievement will always go to the Western institution." This saps the self-confidence of the local workers and people of the village—a very bad thing to have happen since "the growth of confidence that you can tackle your own problems is the crux of development."

Appropriate technology, Reddy maintains, is by no means "primitive."

Indeed, appropriate technology is "advanced high technology if judged by the extent of modern scientific and engineering thinking that goes into it," Reddy contends. For example, calculating the heat transfer of a cooking stove might be compared to calculating that of a re-entering rocket. In assessing the usefulness of a cooking stove, however, a variety of different factors, including social ones, must be taken into account. A solar stove will not be efficient if villagers do no cooking between 10 a.m. and 6 p.m.; a smokeless indoor stove will not be desirable if smoke is relied on to keep down the termite population in thatched roofs....

Reddy warns against trying to develop gadgets and devices for Indian villages while sitting in a lab in Cambridge, Massachusetts. They will never work, because one has to understand the whole social ecology as well as the physical circumstances of a village to know what people need and will use. Besides, the locals have to be involved every step of the way. "This is considered the obvious thing to do for the urban architect," notes Reddy, but somehow with poor people the idea of investigating their habits and preferences and doing test marketing falls by the wayside. "Then they don't like what we have done and we say they are stupid."

Interestingly, an article by Joanne Bower in *Gandhi Marg* for last September, on Gandhian Agriculture, speaks of what the West may learn from the East. The writer says:

It has been suggested that aid need not be a oneway traffic. The West, with its advanced technology, can help the less mechanized countries, but such countries as India and China, which in many regions have retained the fertility of their soils for centuries by an ethic of returning to the soil everything that comes from it, have also much to teach. Specialists such as [Sir Albert] Howard fully recognized this. An humble admission of what is owed to the Mother Earth has been the keynote of many religions, but in the West has been supplanted by an arrogant assumption that man can subjugate everything to his own needs. Howard deplored laboratory work, believing that research into the problems of farming must be made in the field. Merely killing off "pests" was not a solution. They should be regarded as an indication that something was wrong if they became too numerous.

Now at last Howard's conviction that scientists should get into the field is receiving acknowledgment. Specialists from the famous research centre for wheat and maize in Mexico (CIMMYT) are now working side by side with peasants humbly admitting that the aeon of experience has produced wisdom which could never be acquired in the laboratories. Now it has become apparent that even if it were practicable to destroy everything that seems to come in our way, this disturbs the finely integrated pattern of life, which is an offense against nature.

Most of this article in *Gandhi Marg* is devoted to an account of what happens to agriculture under the rule of the values which dominate every aspect of material life in the West. First was the comparative sterilization of the soil by using chemical fertilizers instead of animal wastes. Then came the deadly poisons to kill the pests. Finally, animals are no longer partners in the agricultural community:

With the advent of factory-farming, this long partnership has been shattered. Livestock have become machine tools in an industrial process. Their food is no longer what they would forage in their natural state, but a compound containing drugs and artificial growth-promoters which hasten their path to slaughter. Their medication is not administered only for need but as a safeguard against infection which inevitably results from the conditions in which they are kept...

Financial gain is the basic motive for all these developments and the ultimate reckoning is bound to be worldwide. Research carried on at Cornell University shows that heavy applications of chemical fertilizers and pesticides are robbing the earth of twelve tons of top soil per acre per year. Hardy Vogtman of the International Federation of Organic Agricultural Movements suggests that the United States is now at the point of no return and will be forced to import grain after about twenty or twentyfive years. This may seem unbelievable for a country which has prided itself on being the bread basket of the world. But the abuse of nature cannot continue indefinitely. However, when this is fully realized, it may be too late.

The "developed" countries, it seems, have at least as much to learn as the "developing" ones, perhaps more.