### A CONCEPTION OF UTOPIA

MUST we have strong nations? Is it possible to think about human welfare without invoking the power of the State to assure—as we suppose—the necessary conditions? Is it time for a concerted effort to free modern humans of their sense of dependency on the nation-state for their well-being and security?

Such questions converge on the issue of human identity. Is human potentiality released only by definition in a national constitution, or are there other forms of association that might prove of greater service to the individuals involved? It seems evident that the present is a time when people are at least beginning to consider redefining themselves. Vague feelings about the purpose of life are slowly taking form, pointing revision of social and conceptions. More and more people are daring to say that "we can't go on the way we are," and wondering what, after all, "we" means, and what it should mean.

As yet, however, there is no use trying to consolidate answers to such inquiries in neat summarizing phrases. Our situation is well described in some remarks by Bruno Bettelheim in *Harper's* for last October:

What our society suffers from most today is the absence of consensus about what it and life in it ought to be. Such consensus cannot be gained from society's present stage, or from fantasies about what it ought to be. For that, the present is too close and too diversified, and the future too uncertain, to make believable claims about it.

Yet one sort of consensus is not only possible, but seems very nearly achieved: Our present form of social organization is breaking down, with diminishing likelihood of it being repaired or made to go on functioning. Is this expectancy of malfunction merely a passing gloom, or is it a feeling certain to grow?

A brief account of the way things are now may help to frame our thinking. In *Gandhi Marg* for last August, in a review article, Mrs. (Dr.) Sushila Gidwana (professor of economics at Manhattan College, New York) describes the current scene:

In the 1980s, the global community, consisting of developed, developing, and underdeveloped nations, has emerged with most nations facing not too widely differing sets of economic problems. Inflation, unemployment, ecological imbalances, pollution, disequilibrium, balance-of-payment shrinking supplies of energy and other industrial resources, urban decay, rising crime rates, hazardous waste disposal problems, and intensively competitive export markets appear to be some of the pressing problems of the industrial world. Rising populations, growing poverty, widening wealth and income inequalities, inflation, unemployment, urban slums, sky-rocketing energy costs, foreign-exchange shortages, volatile commodity markets, inaccessibility of the urgently needed technical know-how, increasing dependence upon the developed world and its financial institutions, and lastly, stunted economic growth seem to plague most of the third world countries. Globally, the gap between the rich and the poor is in fact widening.

The mood was notably different two centuries ago. If we take as representative the thinking that pervaded the minds of the American colonists, then making a success of their war for independence, we find the institutions of the feudal age subjected to aggressive criticism. The ways of the Old World would have to come to an end, the Enlightenment thinkers declared. Paine's Common Sense is a good example of the drive and vision of the times. America's Declaration of Independence gave the reasons for establishing a separate and strong nation where Life, Liberty, and Happiness could be pursued in freedom, and the preamble to the Constitution (adopted in 1787) sought the fulfillment of popular longings in "a more perfect union." So, in America, and later

in Europe, the modern nation-state was brought into being. The nation was valued because of the guarantees it offered to free citizens.

The spirit of this great new beginning in social organization was well described by Arthur M. Schlesinger in the January 1943 *American Historical Review:* 

In contrast to Europe, America had practically no misers, and one consequence of the winning of Independence was the abolition of primogeniture and entail. Harriet Martineau was among those who concluded that "the eager pursuit of wealth does not necessarily indicate a love of wealth for its own sake." The fact is that, for a people who recalled how hungry and ill-clad their ancestors had been through the centuries in the Old World, the chance to make money was like the sunlight at the end of a tunnel. It was the means of living a life of human dignity. In other words, for the great majority of Americans it was a symbol of idealism rather than materialism. . . .

To doubt the future was to confess oneself a failure since the life history of almost any American documented the opposite view. A belief in progress blossomed spontaneously in such a soil. If it made some men tolerant of present abuses in the confident expectation that time would provide the cure, it fired others with an apostolic zeal to hasten the happy day. As a keen observer in the middle of the last century said of his countrymen, "Americans are sanguine enough to believe that no evil is without a remedy, if they could only find it, and they see no good reason why they should not try to find remedies for all the evils of life." Not even fatalism in religion could long withstand the bracing atmosphere of the New World. This quality of optimism sometimes soared to dizzy heights, causing men to strive for earthly perfection in communistic societies or to prepare to greet the return of Christ in ascension robes.

It attained its most blatant expression in the national love of bragging. At bottom, this habit sprang from pride in a country of vast distances and mighty elevations and from an illimitable faith in its possibilities of being great as well as big.

We include here the much more recent comments of Luigi Barzini on the Americans (in *Harper's* for last December), since they add dimensions to what Schlesinger says. After noting the tendency of Europeans to copy American ways, this visiting Italian journalist says:

Very few imitators have understood that the secret of the United States' tremendous success is not merely technology, know-how, the work ethic, or It was a spiritual wind that drove the Americans irresistibly ahead. Behind their compulsion to improve man's lot was at first an allpervading religiousness, later the sense of duty. . . . But there always was and still is something unique and different in the American drive, something that must not be overlooked. A disturbingly sacrilegious Promethean element is detectable, an impious challenge to God's will. It is as if while zealously serving the Deity, Americans knew better than He and tried to improve His own inadequate and obsolete idea of the universe and man.

Along with this fulsome self-confidence and, indeed, growing capacity came the idea of Manifest Destiny, an expression which was first used by a New York journalist in 1845, to justify the acquisition of Oregon, and "to possess the whole of the continent which Providence has given us for the development of the great experiment of liberty and federated selfgovernment." The phrase caught on, although its meaning had been plain in the declarations of American policy from the beginning of the nineteenth century. Jefferson was certainly a champion of American expansion and the theme of "destiny" continued as a principle of policy in the later years of expansion in the Pacific, and even, one might say, to the present in the compulsion to "manage" the affairs of other nations around the world. Back in its palmy days, Henry Luce's Life celebrated the "American Century," and in an editorial in 1955 declared that "Ours is the most powerful nation in the world," maintaining that we have "gone further than any other society toward creating a truly classless society." It was still possible, then, to think—or for Life to think—that all was well with our world, and that the nation would go on to greater achievements.

This is the conception of the nation-state that is now challenged by events and questioned and doubted by more and more of its once devoted believers.

Let us say, then, that the belief had ample validity two hundred years ago. The vision of the Founding Fathers made a great deal of sense in those days, and was an inspiration for the common people of that time. And it made sense—although often in caricature—all around the world. Barzini makes this clear:

The success of the American model has been undeniable. . . . More difficult, though not impossible, to imitate—for distant peoples who did not have the American historical background and moral commitment—were the political models: universal suffrage; a bicameral parliament; human rights. Some Latin American nations anxiously put up almost incredible parodies to please the United States: a neoclassical capitol surmounted by a dome; a constitution very much like the original Philadelphia document . . . and, in Brazil and Mexico, the separation of the land into states. Behind the facade, of course, life in those countries went on more or less in its own cruel, shabby, ancient, almost unalterable way. . .

A few years ago, blue-jeaned and long-haired youths everywhere demonstrated, in imitation of American students, against the Vietnam war, which was scarcely their business. Now they all jog, like the former president of the United States. Men all over the world automatically turn to the "American way" of doing anything, to the American solutions, perhaps only because the Americans were chronologically the first to face the problems. Such solutions are the handiest and easiest, and may, of course, be the best, but may, occasionally, be the worst in a different context and time.

During the eighteenth century, the task of reformers was to create strong social forms which would provide freedom and equality to people. They did remarkably well in a rather short time. In the nineteenth century, other labors were required: the state needed shaping up, with watchful control over the growing domestic authority of government. This remained the outlook until after the first world war. But now, as we see, the restraint or control of states has become increasingly urgent, and this seems hardly possible when they have become so powerful and, at the same time, people rely upon them in so David Mitrany said (rather many ways.

cautiously) in his *Working Peace System* (Chatham House, London, 1943):

In brief, the function of the nineteenth century was to restrain the powers of authority; that led to the creation of "political man" and likewise of the "political nation," and to the definition through constitutional pacts of their relation to the wider political group. The Covenant (and the Locarno and Kellogg Pacts) was still of that species essentially, with the characteristic predominance of rules of the "thou shalt not" kind. The function of our time is rather to develop and coordinate the social scope of authority, and that cannot be so defined or divided. Internationally it is no longer a question of defining relations between states but of merging them—the workaday sense of the vague talk about the need to surrender some part of sovereignty. A constitutional pact could do little more than lay down certain elementary rights and duties for the members of the new community. The community itself will acquire a living body not through a written act of faith but through active organic development. . . .

What is the truth—that we cannot have international society until the peoples are free, or that the peoples cannot be free until we have an international society? It is at least arguable that national society might not have come into being if the component parts had been expected to become democratic first. In any case, we can hardly take that stand now, even if in the middle of the nineteenth century it was not unreasonable. The reformers of the time were concerned with the organization of the state, in its constitutional basis; we are concerned with the organization of the world, in its active working relations. The purpose of any new international system would be to regulate the politics of its common life, not the parochial politics of its members. To try to do this would be to inject ideological issues with a vengeance into the whole system, whereas the evident need is precisely to neutralize them. It is a task of practical government, not of political baptism.

Mitrany is arguing for cooperative activities and friendly relationships among peoples, bypassing government or the overt formalities of government. "Our aim," he says, "must be to call forth to the highest possible degree the active forces and opportunities for cooperation, while touching as little as possible the latent or active points of difference and opposition." This is what

he means by his subtitle—"the Functional Alternative."

In short, the state, which was once the means, is now the obstacle to a good human life. Conceivably it will be possible, over some undetermined period of time, to reduce to zero the functions of the state, these being replaced by informal, community-type cooperation in a number of ways.

The present-day criticism of the nation-state—or of what is virtually the same thing, the national economy—proceeds at various levels. In *Democracy* for last October, William Appleman Williams brings qualified socialist criticism to bear on the existing capitalist society, with the same objections applied to Marx. He says:

The metropolis sucks people out of their integrated environment and spews them into the morass of the ghetto-becoming-slum-becoming-sluburb. The capitalist metropolis is a vacuum cleaner. It yanks people from their human place, time, space, and scale. Even more: the sustained and accelerating centralization within the metropolis distorts and even denies any sense—even memory—of a humane set of relationships.

Capitalism does not create neighborhoods. Capitalism instead cements over grass for commuter stations on the main line to nowhere. Bluntly, capitalism destroys neighborhoods and communities.

Hence we face a bit of a problem: How does one deal with a philosophy (Marxism) which praises capitalism for creating the conditions necessary for the realization of community, when in the process of fulfilling its own logic it destroys the conditions and idea of community. . . . My basic proposition is this: American radicals must confront centralized nationalism and internationalism and begin to shake it apart, break it down, and imagine a humane and socially responsible alternative. It simply will not do to define radicalism as changing the guard of the existing system.

What Williams would have us do is restructure "American society into a confederation of regional governments based on proportional representation and the parliamentary system within each region and in the confederation itself." The peoples of the regions would then have the

obligation to become a culture which "prompts other people to emulate its values, procedures, and institutions," earning no reward "beyond the duty to honor even more carefully its principles and practices." His concluding remarks are worth repetition:

Now of course you can dismiss all of this as utopian. I am frankly more than less inclined to agree with you. . . . Indeed, someone ought to write an essay about the transformation of the conception of the frontier: from going out in fear and trembling in the hope of creating something different into simply projecting the present on down the line. That was, it seems to me, the sad nature of John Kennedy's New Frontier. Not only no imagination, but no conception of utopia.

Still another criticism of today's powerful economic states is made by Ivan Illich, as in the August *Gandhi Marg*. The very meaning of *peace*, he shows, has been corrupted by the jargon of statecraft. The Chinese understood by the term a "smooth, tranquil harmony," the Indians an inner "awakening." For us it has lost its meaning for actual human life. Present use of the word indicates only *Pax economica*. Since the establishment of the United Nations, peace has been harnessed to economic development.

With the rise of the nation-state, an entirely new world began to emerge. This world ushered in a new kind of peace and a new kind of violence. . . .

... pax eronomica cloaks the assumption that people have become incapable of providing for themselves. It empowers a new elite to make all people's survival dependent on their access to education, health care, police protection, apartments and supermarkets. In ways previously unknown, it exalts the producer and degrades the consumer. Pax economica labels the subsistent as "unproductive," the autonomous as "asocial," the traditional as "underdeveloped." It spells violence against all local customs which do not fit a zero-sum game.

Secondly, pax economica promotes violence against the environment. The new peace guarantees impunity—the environment may be used as a resource to be mined for the production of commodities, and a space reserved for their circulation. It does not just permit, but encourages the destruction of the commons. People's peace had

protected the commons. It guarded the poor man's access to pastures and wood; it safeguarded the use of the road and the river by people; it reserved to widows and beggars exceptional rights for utilizing the environment. Pax economica defines the environment as a scarce resource which it reserves for optimal use in the production of goods and the provision of professional care. . . . Development has always signified a violent exclusion of those who wanted to survive without dependence consumption from the environment's utilization values. Pax economica bespeaks war against the commons. . . . Pax economica protects a zero-sum game and ensures its undisturbed progress. All are coerced into becoming players and to accept the rules of homo economical. Those who refuse to fit the ruling model are either banished as enemies of the peace or educated until they conform.

The market is the sole vital organ of the economic nation-state. Of its function Karl Polanyi said:

To allow the market mechanism to be sole director of the fate of human beings and their natural environment . . . would result in the demolition of society. . . . Robbed of the protective covering of cultural institutions, human beings would perish from the effects of social exposure; they would die as the victims of acute social dislocation through vice, perversion, crime, and starvation. Nature would be reduced to its elements, neighborhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed. (*The Great Transformation*, 1944)

Scores, rather hundreds, of books have been recording our "progress" in this direction during recent years. The economic and warfare state is the engine which drives us in this wrong direction. Polanyi's solution, as a current writer put it, would be to restore and renew the social fabric "by submerging the economy in the nonmarket social institutions it seeks to destroy."

There is surely reason enough for thinking with great determination about more suitable social arrangements. Those who are already doing this sort of thinking should have our attention. The usefulness to humans of the nation-state has been finished for years, and all its major

operations have become destructive, not only in war but in peace. Our worst enemy, these days, may be its desperate rage to survive.

# REVIEW SCIENCE IN THE HUMAN INTEREST

THE frontispiece of *World Population and Human Values* (Harper & Row, 1981, \$15.75), by Jonas and Jonathan Salk, is a visual or graphic representation of the sudden spurt in the population of the world—an acceleration which began soon after the age of Revolution (in Europe and America) and is now settling down to stability at a much higher level. Graphed, with the population in billions plotted against centuries, this extraordinary growth makes an "S" or sigmoid curve. As a biological phenomenon, the growth curve is no novelty. The authors say:

It represents a general pattern of change that is seen in many physical and biological systems: a pattern of progressive acceleration changing to progressive deceleration, culminating in dynamic equilibrium at a steady-state plateau. Though we focus on the recent acceleration of population growth, similar trends have been apparent in consumption of energy, in rate of growth of scientific knowledge, and, as many people feel subjectively, in the rapidity of change in personal and social life. In this discussion, we apply the image to population and then to changing human attitudes, values, and behavior; however, some readers will undoubtedly see ways in which this curve is applicable to other areas of change in human relationships and experience.

This inquiry seems a use of science that is bound to add at least a little to our knowledge of the human situation—of our situation in relation to the biology of the species, which is a part of the vital natural environment of individuals. If we had good figures on world population going back a few thousand years instead of only a few hundred, we might learn much more, but with the resources at hand, as shown by the Salks (father and son), active minds may be led to useful thinking, including some fruitful speculation. Important discoveries often begin in this way.

One line of such reflection made the stagesetting of an epoch-noting book, Ortega y Gasset's *Revolt of the Masses*, first published in Spanish in 1930. This work was filled with prophetic themes, one of them broadly verified in Germany—by the Nazi rise to power—by the end of the decade. The foundation of Ortega's thesis was biological. He said in the chapter, "A Statistical Fact":

Some years ago the eminent economist, Werner Sombart, laid stress on a very simple fact, which I am surprised is not present to every mind which meditates on contemporary events. This very simple fact is sufficient of itself to clarify our vision of Europe today, or if not sufficient, puts us on the road to enlightenment. The fact is this: from the time European history begins in the VIth Century up to the year 1800—that is, through the course of twelve centuries—Europe does not succeed in reaching a total population greater than 180 million inhabitants. Now, from 1800 to 1914—little more than a century—the population mounts from 180 to 460 millions! I take it that the contrast between these figures leaves no doubt as to the prolific qualities of the last century. In three generations it produces a gigantic mass of humanity which, launched like a torrent over the historic area, has inundated it. This fact, I repeat, should suffice to make us realize the triumph of the masses and all that is implied and announced by it.

With this primary fact in mind Ortega went on to write his book. The Salks with no doubt more and better figures, and with fifty years (since Ortega wrote) of experience with human behavior, achievement and, in some measure, excesses, are able to provide a larger range of possibilities. One question to be decided is when and how soon the population curve will level off—"inflect," is the term used. It is clear, for example, that the more developed regions are levelling off sooner than the less developed. It also becomes apparent that with levelling off there are likely to be shifts in "attitudes, values, and behavior." After a section considering such changes, the authors remark that decisions are involved. suggesting human increased responsibility for the quality of the present transition to a "steady state."

The initial period of expansion is named Epoch A, when driving human action is based on "Individual Power, Competition, Independence," and an "either/or" outlook. As the levelling begins

and moves toward stability, other qualities emerge: "Individual and Group Consensus, Collaboration, Balance," and a "both/and" point of view. Great tensions naturally develop during such a time of rapid change and the Salks' book is addressed to the need for self-awareness and deliberated conscious decision. The writers say:

In the context of Epoch A, the generous or humane attitudes appropriate to Epoch B are qualities not often perceived as pragmatic. However, in the different reality of Epoch B, such strategies will be *both* pragmatic and humane.

For example, improvement in the quality of life in the developing regions and the self-sufficiency of those nations will benefit both the people in these areas and those in the more developed world. . . . Improvements in health care education, and economic viability in the less developed areas will help in ameliorating population pressures, which would benefit the world as a whole. In addition, a balanced relationship of wealth and exchange would lead to more economic and political stability in all regions. In Epoch A, such changes might not have been perceived as beneficial to the more developed areas; they are now being seen as advantageous to all regions.

This work by the Salks is particularly interesting as an example of a new way of practicing science. It is not merely "prediction and control," although these skills enter in; rather, it is science for "guidance in life," as Willis Harman proposed in a recent paper. In short, the more we understand of the rhythms of nature and of the resulting patterns, the more deliberately we are able to adapt to and use natural cycles for both our own and the common good. The book looks toward the synergistic society envisioned by Ruth Benedict and Abraham Maslow. (See Maslow's Farther Reaches of Human Nature.) In his Sand Country Almanac, Aldo Leopold spoke of the need to "think like a Mountain," in order to share and assist in the mountain's needs. The authors of World Population and Human Values would have us "think like mankind" as its larger being is revealed in the collective life cycles under consideration. This is social science in behalf of the intelligence which exercises choice, instead of science which becomes frustrated and blind in the presence of subjective freedom.

There are interesting parallels with the work of the Salks in Howard Odum's ecological researches. In his famous Ambio paper (1973), Odum pointed out that our history (of a few hundred years) has been characterized by rapid expansion and exploitation of resources—a "weed" period in ecological terms—comparable to an ecosystem which rapidly puts out weeds of poor structure and quality. Weeds are efficient in covering a bare field but wasteful in their "energycapturing efficiencies." In our recent history, Odum pointed out, "modern communities of man have experienced two hundred years of colonizing growth, expanding to new energy sources such as fossil fuels, new agricultural lands, and other special energy sources." While it is now quite evidently necessary to accommodate to the succeeding "steady state ecology," our political and economic managers are stubbornly resisting this adjustment. Odum gives the reason:

Ecologists are familiar with both growth states and steady state, and observe both in their work routinely, but economists were all trained in their subject during rapid growth and most don't even know there is such a thing as a steady state. Most economic advisors have never seen a steady state even though most of man's million-year history was close to steady state. Only the last two centuries have seen a burst of temporary growth because of temporary use of special energies that accumulated over long periods of geologic time.

In his conclusion Odum wonders: "Are alternatives already being tested by our youth so they will be ready for the gradual transition to a fine steady state that carries the best of our recent cultural evolution into new, more miniaturized, more dilute, and more delicate ways of mannature?"

We are now in the midst of this great transition, but for many it appears to be only a war between the old and the new. Yet from study of nature we might almost say that the change is "written in the stars," and that, learning this, we

can choose between going forward willingly and cooperatively, or being dragged forward reluctantly, kicking and screaming. Like that of Odum, the science of the Salks is an illuminated display of options, shown with the persuasiveness of examples from many levels of natural phenomena, yet interpreted in terms of the possibilities of human decision. They say:

When viewed from a short-term perspective, . . . the tension and conflict inherent in this transition may seem chaotic and symptomatic of a disintegrating, collapsing world. However, when viewed from a longer-range perspective, as provided by the sigmoid curve, . . . these conflicts and uncertainties can be seen as part of an orderly if somewhat difficult process of nature. Looked at in this way, the disturbances of the present time may be seen not as a symptom of a disease that must be treated or eradicated but as a result of the obsolescence of formerly successful patterns of life and the uncertain beginnings of new patterns appropriate to the emerging conditions. . . .

In recent times, especially deep conflicts have arisen between what is called the modern way of life and the traditional. As is pictured here, a resolution of this conflict will be necessary.

In time to come, we are likely to experience a reconciliation of old and new in the creation of traditions appropriate to the emerging reality. While traditions that were appropriate to former times have been rejected in the course of modernization many of the elements of these older cultures will be essential in combination with those of the present, in the creation of altogether new traditions for the future.

This is a new spirit in science, responsive to human need.

## COMMENTARY THE FITTEST ARE THE WISEST

THE work of the Salks, which has attention in this week's Review, seems a natural flowering of the kind of thinking called for by Michael Polanyi in *Personal Knowledge* (University of Chicago Press, 1958), and in key with Thomas Kuhn's *The Structure of Scientific Revolutions* (same press, 1962). Changes in attitude are going on in science—changes initiated by pioneers such as Erwin Schrodinger and Werner Heisenberg—and anticipated in other ways by Abraham Maslow in *The Psychology of Science* (Harper & Row, 1966).

There has been much criticism of science lately, much of it justified, but not by what the creative spirits in science have accomplished. Science itself needs to be distinguished from scientific institutions. To go from the lives of the great men of science—starting, say, with Bruno and ending with Albert Einstein—to a reading of David Lindsay Watson's *Scientists Are Human* (which is an aggressive critique of the "closed shop" attitude of scientific institutions) is likely to shock some readers. In his way, Watson (his book was published by Watts in 1938) anticipated a central contention of Michael Polanyi twenty years later. He said:

Science is trying to make a dignified retreat from its recent uncritical faith in the "objectivity" of the last century. . . . We have been led to believe in recent years that science draws its authority from a mechanical integrity, whereas for the real scientist, it is a moral integrity that is the essence of the matter. A lack of understanding of this has produced an exquisite confusion, both within the gates of science and without, where, in the lay mind, the qualities of both science and the scientist have been inferred to be those of the uninspired hod-carrier.

The reader of *World Population and Human Values* will find that while the setting of its content is a great biological cycle of which we have only lately become aware, the *thesis* of the book is moral: the authors point to realities of our collective biological nature which have become

the cue to intelligent moral decision. In his earlier book, *The Survival of the Wisest* (Harper, 1973), the senior Salk suggested that morality for man involves choosing between the dictates of "ego" and the admonitions of the noetic thinking of which we are all capable. In the present move toward a stable population and "steady state" existence, we have one such decision before us.

#### **CHILDREN**

#### ... and Ourselves

#### WHAT GOOD IS IT?

THERE is an area that many teachers—as well as the rest of us—parents, etc.—shy away from as terra incognita. Call it the *Education of Vision*—the title of a splendid book on the subject, edited by Gyorgy Kepes and published by George Braziller in 1965. From the contribution by Robert Jay Wolff, we take these questions:

Is it possible that the superficiality, the dependent conformity and inaction that has been found so typical of young people today, is a condition partly created by education itself and then misunderstood by it? . ..

How often are our students reminded that the real goal of their frantic educational effort is the total well-being of man himself, a creature whose powers, however fantastically projected, spring from an organism which has remained unchanged through eons of time?

Is it possible that these powers are being diminished and atrophied by conceptual processes that nourish and utilize only a part of the inherited human potential? . . .

Can we be sure that the sickness that we diagnose as inertia and indifference in our young might not well be, in truth, the stubborn resistance of healthy organisms to self-destruction?

This is the cry of an artist, repeated in various ways throughout the book, along with effective illustrations of what is meant by visual education, showing why it is important; and why, without it, humans are virtually mutilated in their psyches.

What is visual education?

We came across something by Margaret Mead (taken from her book, *Blackherry Winter*) in David Weitzman's *Eggs and Peanut Butter* (Word Wheel Books, P.O. Box 441, Menlo Park, Calif. 94025), that seems a good answer and an introduction to the subject. Telling about her childhood, Margaret Mead wrote:

My grandmother began school teaching quite young, at a time when it was still somewhat unusual for a girl to teach school. When my grandfather, who was also a teacher, came home from the Civil War, he married my grandmother and they went to college together. They also graduated together. She gave a graduation address in the morning and my grandfather, who gave one in the afternoon, was introduced as the husband of Mrs. Mead who spoke this morning.

She understood many things that are barely recognized in the wider educational world even today. For example, she realized that arithmetic is injurious to young minds and so, after I had learned my tables, she taught me algebra. She also understood the advantages of learning both inductively and deductively. On some days she gave me a set of plants to analyze; on others, she gave me a description and sent me out to the woods and meadows to collect examples, say, of the "mint family." She thought that memorizing mere facts was not very important and that drill was stultifying. The result was that I was not well drilled in geography or spelling. But I learned to observe the world around me and to note what I saw-to observe flowers and children and baby chicks. She taught me to read for the sense of what I read and to enjoy learning.

Well, someone might say, "Nature study may be *nice*, but what practical *good* is it? The author and editor of *Eggs and Peanut Butter* provides a reply, for those who will take the trouble to understand it:

Color American education bland, monochromatic and dull the grey of the printed page.

For lots of reasons Americans have a thing about written and spoken language, and the results of this are everywhere. Precise use of English is valued above poetic, colorful, individualized expressionand so, it's emphasized in school. Technical competency is valued above creativity—and so it's emphasized in school. Convergent thinking over divergent thinking [Schumacher made distinction], conformity over individuality, over and over we see the marks of a society which emphasizes above all the skill, mastery, and manipulation within strict technical limits—of a written language.

(On this, see Plato's playful reproach to the inventor of written language, in a little allegory in the *Phaedrus*.)

#### Weitzman goes on, giving background:

Anthropologists have long been aware of the difference between societies that are literate and societies that are illiterate or preliterate. For instance while we may not think of it that way any longer, writing is a technical skill, which we begin to develop when we encourage children to pick up a crayon or a pencil to draw and scribble. It continues on in school when, beginning at about the age of seven, children They learn to develop precise learn to write. muscular control in their hands in order to write, and then throughout their entire school career they are expected to use pencils and pens and, to a lesser extent, to draw. In a primitive society, where there is no written language, the child at the same age, at a very early age, is given perhaps a knife with which to carve images so that by the time a European or an American child is writing or using a pencil or a pen with fair skill the child in a preliterate society has learned to use a knife or some other kind of carving tool. The end result is that children in Europe or America eventually learn to express themselves reasonably well using the conventional symbols of the language. On the other hand, the child growing up in the primitive society learns to express himself equally well with the conventional symbols of art.

Again, What good is it? Well, in *Education* of Vision William J. J. Gordon tells about the value of metaphor and visual images in teaching college physics. He shows that the Harvard freshmen he worked with learned to know the laws of physics for themselves, not as "correct answers" in the terms expected by the professor. The illustrations of how this teaching was done are too complicated for summary here, but it becomes evident that creative work in the sciences requires the use of metaphor and analogy. In one place Gordon says:

Perhaps the greatest danger in the teaching of science is to present students with a *fait accompli* universe. It is a didactic tradition that undergraduate students must accept the phenomenological universe as described by someone with special knowledge, i.e. the teacher. The teacher is saying to students that they must surrender to his rules or they can't play in his backyard. By the time a student has clerked his way through his undergraduate work in a science, it may be impossible for him to tolerate the ambiguity of constructing his own ways of understanding.

It takes time for most students to develop the use of imagery in their thinking, but the reward is great—self-reliant and inventive minds.

How does visual thinking work? In the opening essay in *Education of Vision* Rudolf Arnheim gives a simple answer:

Peter and Paul are confronted with the same task: "It is now 3:40—what time will it be in half an hour?" Peter proceeds as follows. He remembers that half an hour equals 30 minutes. Therefore 30 must be added to 40. Since the hour has only 60 minutes the remainder of 10 minutes will spill over into the next hour. This gives him the solution—4:10.

For Paul the hour is represented by the circular face of the clock, and half an hour is half of the disk. At 3:40 the minute hand is placed obliquely at four five-minute units to the left of the vertical. Using the hand as a base, Paul cuts the disk in half and arrives at two units to the right of the vertical on the other side. This gives him his solution, which he translates into numbers—4:10.

Both Peter and Paul solved the problem by thinking. Peter translated it into quantities without reference to any sensory experience. He handled the numbers by means of relationships which he had memorized as a child: forty plus thirty is seventy; seventy minus sixty is ten. He thought "intellectually." Paul, on the other hand, approached the problem by a suitable visual image. For him a whole is a simple, complete shape, a half is half of that shape, and the progression of time is not an increase in arithmetical quantity but a circular journey in space. Paul thought "visually',

#### **FRONTIERS**

#### "Seeds . . . Flying around the World"

THE part played by ideas in the creation of frontiers is sometimes overlooked The Italian Revolution, now underestimated. almost forgotten, was born from Joseph Mazzini's vision and eloquence, and won by Garibaldi's determination in the field. What was its inspiration? His mind, Mazzini said, was turned to democratic thinking, first, by the equal courtesy of his parents to every rank of life, and last by his studies of Greek and Roman history. A schoolboy companion of Mazzini said of their education—in a time of extreme censorship—that the history of the ancient world was "the only thing taught us with any care at school." Its content "was little else than a constant libel upon monarchy and a panegyric upon the democratic form government."

So, from Cato and other ancient spokesmen for free institutions, Mazzini obtained the foundation of his political education—with what excellent result we know from the major accomplishments of his maturity. Then, earlier, there was Thomas Paine, recently named by an Englishman (Michael Foot) as "the most farseeing Englishman of the eighteenth century," whose ideas are still alive and stirring minds around the world. Paine was the first to use the words, "the United States of America," and might justly be called the country's first citizen. His Common Sense fired the colonists to revolt, as shown so well by Bernard Bailyn in Fundamental Testaments of the American Revolution. While he lived Paine's pamphlets "probably had a bigger sale than anything published since the invention of the printing press, second only to the Bible." In England his printers were imprisoned, but it was impossible to suppress his ideas. Rights of Man still sells some 5,000 copies a year.

What sort of man was Paine, whose voice rang with heroic vision of the future? In his recent book, *Debts of Honour*, Michael Foot says:

No cloud of uncertainty crossed his horizon neither when he walked amid Washington's bedraggled and beaten armies nor when he was being hunted out of England for his high treason with William Pitt's policemen on his heels, nor even, on that most macabre occasion, when he waited in one of Robespierre's prisons to be taken to the guillotine. That was an hour of disillusion and despair if ever there was one. He, the most merciless exposer of monarchy, had pleaded for the King's life in the name of mercy; and when his own life was at stake even his beloved America would breathe not a word to rescue him. Yet with his great argument on earth gone temporarily awry, Paine turned to put heaven to rights. He settled down in his over-crowded cell to write The Age of Reason.

Paine, Washington thought, had more to do with the achievement of American independence than any other individual, and tried to rescue him from neglect, but only lately has he been more fully appreciated by his countrymen.

In a valuable article in the *Listener* (March 18, 1948), David Graham wrote on "Gandhi's Debt to Ruskin and to Tolstoy," showing the discernible influence of these writers, and adding:

I am not saying that Gandhi would never have hit on these ideas if he did not happen to read Ruskin and Tolstoy—of course not. Ruskin and Tolstoy may have brought him confirmation of his ideas which were already beginning to take shape in his mind. But if so, it was important confirmation which Gandhi would probably not have got from anywhere in India.

An informing essay by William Condry, "Thoreau's Influence in Britain," in the Fall 1981 *Thoreau Society Bulletin* (available from Walter Harding, State IJniversity, Geneseo, N.Y. 14454), reveals both how little and how much can be done in tracing "influence." Speaking before the 1981 annual meeting of the Society, Mr. Condry, who lives in Wales, begins with the difficulties:

Well, my business today is the tracing of influence, which is notoriously dangerous ground. It's so easy to get carried away and exaggerate a writer's importance if you happen to be fond of him. On the other hand it's quite possible to under-estimate the influence of a writer like Thoreau because he appeals mainly to the sort of people who are unlikely

to make a great noise in the world. There's certainly one thing we should be thankful for—that Thoreau never formulated his ideas into some sort of an "ism" because this "ism" would have had its day and would now be forgotten. Like Fourierism, for instance. As it is, his ideas are free to float off in all directions like the seeds of thistles; and they're still flying around the world.

He locates Thoreau enthusiasts in England during a time when the Concord rebel was almost forgotten in America. Best known, perhaps, was Edward Carpenter, who came to be known as the English Thoreau as well as the English Whitman. (A thorough account of Carpenter's work and influence may be found in the anarchist review, Freedom, Feb. 27, 1981.) Henry Salt (1850-1939), another forgotten man, introduced Thoreau's work to Gandhi, with well known results; and doubtless also to his friends, William Morris, W. H. Hudson, and George Bernard Shaw. Robert Blatchford (1851-1943) began his blistering attack on social conditions in England "with the suggestion that if his readers read Walden first they would better understand what he, Blatchford, was getting at." Blatchford's book Merrie England sold two million copies and Mr. Condry suggests that the thought of late nineteenth-century English socialists was largely tempered by writers such as Whitman and Thoreau:

They knew more about Shelley and Carlyle than about Marx and Engels. Many of them had read *Leaves of Grass* and the brotherhood of man was very dear to them. Eventually they were to be dismissed with contempt by their successors in the labour movement as "the sentimental socialists" because they had a moral rather than an economic basis for their ideas."

Yet by the turn of the century "there were various small local Thoreau societies and Walden clubs at that time." Later English Thoreauvians were Henry Nevinson (famous journalist), H. M. Tomlinson (influential novelist), and Dugald Semple, "the Scottish Thoreau."

The Americans, Condry suggests, ignored Thoreau for a long time because of his

"eccentricities," which were familiar and gossiped about.

But to the British, 3,000 miles away, Thoreau was not a person. He was a book, a very unusual book, called Walden, which began to be widely known over there about 1880 onwards. So it was the book's ideas, not so much the author, which were of interest. The question is: did these ideas speak to the condition of people in Britain? The answer is a decided yes for many of those who questioned the values upheld by the establishment. They rejoiced to come upon a writer who so cheerfully bulldozed his way through conventional current notions with forthright statements such as: "This life is a strange dream and I don't believe at all any account men give of it." Well, you can't clear the deck more completely than that. Any dissenting individualist, any protest movement, could link arms with such a writer. And they did.

But weren't many of Thoreau's ideas far ahead of his time? Condry agrees, adding that they're none the worse for that. "Seeds can lie dormant many years until their time comes." Judging from the burgeoning interest, now, in Thoreau, that time is growing closer. Thoreau, this Welchman thinks, speak directly to us.

He says so much that is directly to the point about man's place in the world. He saw that as man drifted ever further from nature and simplicity in pursuit of a manifest destiny (which used to be called progress and which today we call a growth economy), the poorer must become the quality of his life. So I am grateful to Thoreau for phrases like "the tonic of wildness" and "in wildness is the preservation of the world."

Well, Thoreau's readers may not "make a great noise in the world," but they are surely helping to preserve its life, and may one day change its discord into melody.