

"WHY HAVE WE BEGUN?"

THE Platonic verity that ideas rule the world is no longer regarded as an ivory tower conceit. It is becoming increasingly evident that the radius of human action is a function of ideas about what is possible and important to do. Whether you pray or start excavating for a mine depends upon what you think about the way things get done. What you are willing to undertake depends upon what you think you are able to do. This thinking affects our relations with others. One parent may research the plot and unfolding story of the Little Red Hen for some character-building reading to a child, another may attend a PTA meeting to find out what the third-grade teachers are doing about her offspring's self-image. It is often difficult to separate our own thinking from the intellectual fashions of the day. We may not be what we think we are, but what we think about the self sets limits, defines differences, and sometimes locates openings or options. There are the givens in life, there is what we see of them, and there is what we do about them; and it is here, in what we attempt to do, that ideas rule. And as Richard Weaver put it, Ideas have Consequences.

The desire to be in charge of one's life is regarded as a sign of normality and health, and from this it follows that writers and thinkers who identify the ruling ideas of their time, trace their consequences, and offer criticisms and recommendations are the monitors and teachers of civilization. People may listen to them or not, but unless they are eventually heard the ranges of free decision are continually reduced until disaster and failure establish a very different set of circumstances, and then the ideas which direct a new beginning have at least the simplicity which necessity dictates.

Finding out about the ideas which shape human lives is a far more complicated undertaking than taking the temperature of a feverish patient.

While you learn something about the ways of a feverish society by looking at the statistical curve of death from traffic accidents, from year to year, or inspecting the alcoholism and divorce rates, such facts do no more than suggest that we need to look further. At the same time, if we leave the facts behind, it is often difficult to maintain connections between the ideas we hold and the increasingly unpleasant conditions of our lives. The good writers, in short, are able to show the relations between what we think and do, and what confines us and gives us pain.

One such writer was the late Paul Goodman. Like some other critical inspectors of contemporary ideas, at first Goodman had trouble gaining an audience. Sixteen publishers, he said, rejected the manuscript of *Growing Up Absurd* before *Commentary* printed some of the chapters and Random House put into print a book destined for best-selling fame. In a thoughtful evaluation of Goodman's contributions, Taylor Stoehr (*Nation*, April 9) said:

The reason *Growing Up Absurd* was so popular—and remains in print almost twenty years later—is not because it focused on the plight of young men trying to find their manhood but because it was the first book to show how modern society systematically thwarts and betrays its youth by not providing a viable community to grow up in. Goodman did not claim that the cold war was responsible for this disaster; the war mentality was simply the continuing international manifestation of the lives we all led, and the institutions we all served.

...

In truth Goodman had no character or taste for politics even "peace politics." Paradoxically, that was at the heart of his radicalism. His fertility in thinking up practical alternatives, for example, was a direct result of his disbelief in "the ability of parties and governments to accomplish any positive good." If one did not look to the state for solutions, one might discover them for oneself. He was marvelous at this sort of thing: putting together orphans and the

elderly, subsidizing farmers by establishing rural hostels for slum kids, setting up neighborhood mini-schools and using the city as a classroom, and dozens of other ways of coping with the world as we find it.

Emphasis on the importance of ideas was paramount with Goodman:

His idea of educational reform, for instance, when he testified before a Congressional Committee, was "don't give them a penny!" Another time, he was asked whether man's institutional needs and spiritual development might not be deeply incompatible, so that there could be no hope for civilization without a change in our whole system of values Goodman replied that what "we need at present for our social ills seem to me to be prudence, temperance, courage, justice—they seem to me perfectly excellent . . . and these are all very old-fashioned virtues, which I think are quite sufficient." . . . It was Goodman's special gift, unlike that of any other social critic of the 1960s, to see this complete picture, and to understand that it was not some single institution, or even a group of institutions, that needed reform but the overall drift of society. Once you saw that you could not make corrections here or adjustments there without altering the entire machine, it became clear that such changes were not the point; the key was not knowing which institutions to attack or what modifications to propose but how to bring people to their senses. How to revive the old-fashioned virtues, and give people choices on which to exercise them.

How do you get people to adopt old-fashioned virtues? No one really knows. "It is idle," Martin Buber said, "to call out, to a mankind that has grown blind to eternity: 'Look! the eternal values!'" Goodman knew this too, and, like Buber, kept pointing to the causes of the pain suffered by modern mankind. Pain, for the great majority, is the key to awakening to values. But awakening is not acting. So Goodman did what he could to set an example of the action open to an awakening man. *The Society I Live in Is Mine* was a book filled with examples of what to do. Meanwhile he went on drawing attention to the pain which results from the ideas we hold:

Young people especially were outraged at how the established order—government, the military, industry, education, the media—connived in the abuse and disregard of every traditional value. Our resources were wasted, our lovely countryside

polluted, our cities a shambles, the entire network of public communications was in the service of a venal standard of living and soporific entertainment; the young were taught to behave themselves in educational salt mines; public moneys were poured into wars which destroyed other countries, or into the roads and cars which destroyed our own; young men were conscripted and sent to die in foreign lands or, if they refused, to rot in jail at home; citizens were systematically lied to about all of this, knew it, and had lost their faith in human nature, including themselves.

The best examples seem to come from people who point to the pain, identify the ideas which cause it, then suggest alternative ideas and actions by individuals. Here, for example, is a reader's letter to *Fellowship*, highlighting ridiculous incongruities:

I am puzzled by the strange fact that America is the richest nation in the world, but it is almost impossible for its workers to buy or build houses to live in. Even the workers of undeveloped, poor countries do that!

I am also puzzled by where the mortgage money goes. If one takes out a twenty-year mortgage to buy a house, he has paid twice the original price at the end of twenty years. The working person can barely make the purchase price; to double that purchase price literally enslaves that person for the best portion of his or her life. No wonder so many mobile homes dot our landscape so incongruously.

As I see it, there are three possibilities. Several families could buy a farm and start a commune like the early Christians, owning everything in common. Or we could build houses as they did in Europe in the Middle Ages. In England, for example, the Elizabethans built the most comely cottages, many of which are still in use. . . . We can climb the hill of history, and looking backwards, turn, and envision what will lie ahead by using old ways, simple ways that are in keeping with Christ's warning against riches, and Peter Maurin's philosophy of living in the country, where it is a little easier to be good.

The uses of literature for the examination of ideas are more difficult to follow, since for reasons of authenticity in story-telling, they may be tortuously indirect. Writing on recent Eastern European books in the *Nation* for April 23, Ivan Sanders speaks of the recurrent theme of horror.

Of the work of the Hungarian George Konrad, *The City Builder*, he says: "The highlights he offers from his city's history culminate invariably in sieges and slaughters. His main character as well as other figures who flit in and out of the narrative are survivors of various ordeals who like to think they have been chastened by their harrowing experiences but who realize with horror that they have only been brutalized by them." Mr. Sanders concludes:

The persistent preoccupation of Eastern European writers with political repression, war, and the futile search for personal freedom may strike the Western reader as chastening, but somewhat redundant. Yet, in thinking of the finest examples of recent writing from Eastern Europe . . . one realizes that unconventional narrative techniques and startling shifts in authorial perspective can cast familiar subjects in a new light, and that only by these means can certain realities be approached.

Susan Sontag makes a somewhat similar point in speaking of the concentration by Bernd Kleist (1777-1811) on "the morbid, the hysterical, the sense of the unhealthy," which revolted Goethe, but which we are able to understand. In an essay on Simone Weil she says:

Today Kleist gives pleasure, most of Goethe is a classroom bore. In the same way, such writers as Kierkegaard, Nietzsche, Dostoevsky, Kafka, Baudelaire, Rimbaud, Genet—and Simone Weil—have their authority with us because of their air of unhealthiness. Their unhealthiness is their soundness, and is what carries conviction.

Perhaps there are certain ages which do not need truth as much as they need a deepening sense of reality, a widening of the imagination. I, for one, do not doubt that the sane view of the world is the true one. But is that what is always wanted, truth? The need for truth is not constant no more than is the need for repose. An idea which is a distortion may have a greater intellectual thrust than the truth; it may better serve the needs of the spirit, which vary. The truth is balance, but the opposite of truth, which is unbalance, may not be a lie. (*Against Interpretation*, Delta, 1966.)

One chooses the artists of distortion carefully, hoping to find some roots of sanity to cling to—as one does in Dostoevsky—yet Susan Sontag's

point is that when the truth needs to be seen through some portal of pain simply in order to be recognized, an art of extremity may be necessary. She says of Simone Weil:

No one who loves life would wish to imitate her dedication to martyrdom, or would wish it for his children or for anyone else whom he loves. Yet so far as we love seriousness, as well as life, we are moved by it. In the respect we pay to such lives, we acknowledge the presence of mystery in the world—and mystery is just what the secure possession of truth, an objective truth, denies. In this sense all truth is superficial; and some (but not all) distortions of the truth, some (but not all) insanity, some (but not all) unhealthiness, some (but not all) denials of life are truth-giving, sanity-producing, health-creating, and life-enhancing.

There are further complexities. For example, the "truths" that people claim as their inspiration and guide may have practically no relation to the ideas they act upon. And the ideas they act upon are of course the *ruling* ideas, the ones that produce consequences. In the *Sierra Club Bulletin* for last April, Michael McCloskey, executive director of the Club, wrote about "the quest for an ultimate model of wise stewardship or enlightened management of natural resources" in the United States. He began by suggesting a comparison:

One can harken back to the 1930s to remember familiar images in brochures issued by federal agencies—happy farms, neat forests, blissful wildlife, and busy darns and roads coexisting with each other and nearby cities in well-regulated contentment.

Forty years later, one can well ask whether that nirvana has arrived in the United States.

To score our present achievements, Mr. McCloskey looks mainly at forestry and agriculture, with a little attention to whaling and fishing. Timber is taken from two sources—wild forests and secondary growth. Not much is known, he says, about the cyclic harvesting of timber, and at present, in the West, the last five per cent of virgin timber stands are being cut. On private lands the cutting exceeds the growth of new timber: in the past twenty years the inventory

(including new growth) of timber on lumber company land declined by 32 per cent. The Oregon inventory dropped by 42 per cent. The decline has been slower in national forests—5 per cent. These northwestern regions are the major source of lumber for the country, and according to a Library of Congress study Oregon is cutting its total stock "at a rate *five times* the rate of growth of new timber." The timber industry, Mr. McCloskey reports, is now seeking permission to cut at a rate which would mean "liquidation of the last forty million acres of virgin timber in the shortest possible time." Present cutting and marketing policies, he says, show "no real commitment to sustained production of lumber," the trend being "toward shorter and shorter growing cycles and more and more processing" for pulp, plywood, and particleboard.

In the meantime, the soil base is disturbed more often, producing more erosion. In many forests with fragile soils, soil is eroding at rates 100 to 1,000 times faster than it is being formed, suggesting that only two to six growing cycles are possible before all the soil is essentially gone.

Similar policies are being applied to the vulnerable tropical forests of Brazil, the Philippines, and Indonesia, with cutting rates forty times what they were less than ten years ago.

The outlook for the country's rangelands seems dim. With more than 80 per cent of all beef cattle now passing through feed lots, the natural fertilization of the ranges by free-roaming cattle has been interrupted, while the manures collected on feed lots are a major solid-waste disposal problem. Only 12 per cent of the rangelands remain in good condition, with 33 per cent in poor or bad condition.

In American agriculture during the past twenty-five years, "the rate of fertilizer use has increased eightfold, insecticide use tenfold and herbicide use twentyfold." The tripling of corn yields in that time required fifteen times more fertilizer. Meanwhile, "more than 54 million acres of good farmland were lost in the U.S. to

encroaching urbanization—housing tracts, shopping centers and freeways—or to energy developments—power plants, transmission lines, strip mines and reservoirs." Farmers are giving less attention to soil conservation practices, relying instead on fertilizers and pesticides. Erosion is again increasing. "This," says Mr. McCloskey, "seems to be the response of American agriculture to heavy world demand and rising energy prices."

Having committed itself to the ultimate in mechanization it is now caught by its own inner logic in a ruthless search for efficiency, which leaves little place for the externalities of wildlife, soil protection, ecological stability, amenities the virtues of the family farm and the needs of the future.

That is the rule of one set of ideas. From them we turn to other ideas just getting born, or now beginning to move informal associations to another kind of action. In Minneapolis last April, eighty-five people gathered to form an Association for Appropriate Technology. In the first issue of the newsletter of this group, Paul Stolen conveys the mood and outlook of the members:

Our ultimate goal, as an organization is uncertain and we may never have one. Perhaps it will be to change fundamentally the way our society looks at resources. This is not new. . . . One thinks of Aldo Leopold's land ethic as an example. Leopold said this in 1949. . . . Why have we begun to form groups like this now? Why are there people stepping out of easy lives and, as some members of this group are doing, working in the face of adversity to find more ethical ways of doing things for themselves?

Perhaps it is because we have lost our innocence. We are more aware now. . . . We have much better evidence of what technology can do to the environment and to people when we divorce it from ethics. At the same time we are more knowledgeable about alternatives.

Whatever the reasons for this movement, we all are aware of it. . . . When someone makes the step from talking and thinking about something to actually taking action, there is a fundamental mental change. Action clears the mind. This was evident at the meeting from the kinds of things people were talking about, and especially in the somewhat unnatural

rural-urban split at the end. The rural people are mostly already doing things; they are impatient to get on with it. They have specific goals. Some of the urban people are in the same situation. Thus it is not really a rural-urban split—it is mostly that some are farther along than others.

It seems to us that it takes a certain kind of courage to think outside the mainstream and especially to take the actions that people in this coalition are taking in their own lives. There is little security in this life.

These people have stopped letting other people do their thinking for them. . . . There isn't any way a coalition will tell these people what to do. . . . Good. Diversity on a farm means one is less likely to be wiped out by drought, storms, or pests. Diversity here means this: there are more ideas to draw from. . . . We need to have a sense of more ideas to draw from. . . . We need to have a sense of community. People who are doing new things need support. We need to know what the rest are doing, how to trade ideas, labor and services. We need to know how to help each other.

REVIEW

THE LARGE AND THE SMALL

WE once proposed here that E. F. Schumacher ought to write a primer on economics that could become the foundation for a reform in teaching the subject. Well, he did it—he wrote *Small Is Beautiful*, which has had a sale of two million copies, producing the impact it deserves. What reform does Schumacher recommend and in some measure accomplish? The practical advice is in his title, and the accomplishment is in restoring economics to a position subordinate to philosophy, where it originated and where it should remain. Now comes another book in the same category, *The Overdeveloped Nations*, by Leopold Kohr, which deserves the same sort of attention. Prof. Kohr, who is no stranger to these pages, was for years professor of economics at the University of Puerto Rico, and now teaches at the University College of Wales in Aberystwyth. (Earlier books by him reviewed in MANAS were *Development without Aid* and *The City of Man*.)

While *The Overdeveloped Nations* was first published in German and Spanish in 1962, the author has found no reason to bring its arguments "up to date." His explanation makes a good example of the temper and attitude of humanistic science, showing that the "last word" is by no means the most important:

Unfortunately, I do not believe in the practice of updating, apart perhaps from inserting an occasional "the late" before the names of such persons as Dr. Nkrumah or Nikita Khrushchev, who were still alive when I cited them as witnesses. Even that I do with reluctance, just as Thucydides would have hesitated to update his *History of the Peloponnesian War* by referring to Pericles as "the late" or, still worse, by replacing the names of past leaders with those of their successors. Nor do I believe in adapting my figures as I consider that the only value of figures is their ability to illustrate a philosophic proposition. If newer figures disprove a proposition, it was never any good in the first place. What should then be done is not update the figures but drop the proposition and, for good measure, tear up the book one has written about it. If, on the other hand, a proposition has

validity, it can be illustrated by an old set of figures just as well as by a new one, for the same reason that a true analogy from one field is as good for making a point as one from any other field. As Dionysius said of history, that it is philosophy taught by examples, so one can say of statistics that they are philosophy illustrated by figures. It is the latter's rhythm that matters, not the date of their compilation.

The Overdeveloped Nations has two notable qualities—sanity and good humor. Judging from the past, good-humored reformers are hard to come by, and since humor and pleasantry are tools of persuasion, their use in the service of sanity is much to be admired. There are other fine qualities, such as the author's unabashed use of unexpected yet plainly applicable analogies, and his willingness to regard both the Oracle of Delphi and Socrates as authorities worth citing today.

Prof. Kohr's contention is quite simple: the multiple economic disasters of the present are the result of *size*. The nation-states of the present are too big, their economies out of control. The social functions of an economic system become disorderly beyond a certain size, and the facts and figures in this book are mainly devoted to showing what that point is, in terms of the somewhat variable factors involved. Size is of course not the only critical consideration in economic arrangements, but Prof. Kohr means to show that when a system gets too big, things begin to go wrong, making the other factors less and less important. As an economy grows large, it requires more and more people simply to keep it going; the system becomes the important thing, and not the people it is supposed to serve.

The figures on this seem indisputable, but better for grasping the idea is the analogy of a very tall building. Prof. Kohr illustrates the "geometrically multiplying problems of scale which affect overgrowing societies" with what happens when skyscraper buildings go on up:

For above the height of 50 or 60 floors, the cost space of skyscrapers increases faster than pay space. This goes on until, at the height of 400 floors, the sheer problem of servicing the structure would assume such proportions that the entire skyscraper

would have to consist of nothing but lifts necessary to transport the people, who would have room in it if the space needed for transporting them would not have deprived them of all space needed for housing them. In spite of its splendour and phenomenal beehive productivity, all the giant structure could offer us is employment as lift boys.

What about the economies of small states? There is plenty about the achievements of Iceland, Switzerland, Denmark, and even Liechtenstein (pop. 17,000), which coyly sells a postcard showing its last soldier—who became obsolete fifty years ago.

Liechtenstein's public education takes students only halfway through high school:

As the Prime Minister told me, to make it appropriately difficult, higher education must be taken at the student's own initiative and expense abroad—in Austria or Switzerland—on the healthy assumption that too much education would damage the easy balance of the principality since its small dimensions could not possibly accommodate more than 8 to 10 lawyers, the same number of dentists, and perhaps twice the number of doctors. As a result, state-supported higher education, instead of enriching people, would merely frustrate them since even as Ph.D.'s they could do nothing but farm or emigrate. And aside from that, a small country's problems are so translucent, that it needs no college education to grasp them. The Prime Minister himself was an elementary school teacher and prides himself on being the son of a stable boy. Yet unaided by doctors of law, economics, or political science, he prepares a budget whose excellence is such that I find it more useful for classroom study with my students than the vast documents of the large powers whose problems differ from those of Liechtenstein not by their nature but by their unmanageability. Hence, as a European wit once said to an American friend in pre-Hitler days: "We have liberty, you have the Statue," so tiny Liechtenstein may say to the prestigious academic institutions of the great powers such as Oxbridge and Haryale: "We have the sound economy, you have the great professors."

Liechtenstein, Prof. Kohr remarks, is obviously a capitalist country since there is nothing in the budget to provide for economic controls. State and economy are small and their organization needs little attention. As

organization and economies grow large, the care they require to make them run smoothly begins to eat up the substance of the people. Capitalist, Communist, whatever, if they're big the organization eventually monopolizes both attention and wealth:

Thus, under the arch-conservative administration of President Eisenhower, Washington declared with undisguised relish that, after years of democratic squandering, balance had at last once again been achieved during the year 1956—an election year at that. But what was at the time ignored in the exultation, was that the *level* at which balance had been achieved was higher than at any other period in history. In other words, under the anti-socialist presidency of Eisenhower, the socialist sector of the American economy had assumed greater proportions in a time of relative normalcy than under any other President. Thus, if President Truman was a socialist, as he was so often accused by his successor, President Eisenhower will, by comparison, have to be classed as a Communist. And so will all who came after him. Which only demonstrates once more the degree to which not man nor philosophy, but social size, determines at given levels everything, including the direction of budget policies. For the last one to lead us voluntarily along the road of socialism would have been Dwight Eisenhower.

Prof. Kohr is not an ideologist; he is interested in the forms of economy which allow human beings to live satisfying and harmonious lives. He maintains that there is a "right" size of human and economic community for this to happen—a size which does not get in the way of the means and goals of self-rule. He takes his model, not from theorists, but from natural history:

In a superb study on the interrelationship of growth and form, the great English biologist W. D'Arcy Thompson has shown why nature puts a stop to the growth of things once they have become large enough to fulfil their function. A tooth stops growing when it can effectively bite and chew. If it grew larger it would violate its function. It would impede the organism it is meant to strengthen, and would have to be pulled out. Similarly a snail after having added a number of widening rings to the delicate structure of its shell, suddenly brings its building activities to a stop. For, as D'Arcy Thompson points

out, a single additional ring would increase the size of the snail sixteen times. Instead of adding to the welfare of the snail, it would burden it with such an excess of weight that any increase in its productivity would henceforth be absorbed by the task of coping with the added difficulties created by enlarging the shell beyond the limits set by its purpose. Moreover, since from that point on the problems of overgrowth begin to multiply at a geometric ratio, while the snail's productive capacity can at best be extended at an arithmetic ratio, it follows that, once overgrowth sets in, the snail will never be able to catch up with the added problems created by it.

This is the fundamental philosophic reason why there is a limit to all growth. Though highly beneficial up to a certain point, beyond it, it not only becomes life's chief complexity; it becomes nature's principal tool by which it leads its organism to obsolescence and destruction.

Prof. Kohr's critical analysis of the flaws of excessive size in political economy is not in the least simplistic. He shows that several factors—number, density, integration, and velocity—together determine the effective size of a society, in relation to its economic and social processes. These are considerations which call for attentive study of the author's expositions and illustrations. The publisher of *The Overdeveloped Nations* is Christopher Davies Ltd., 4/5 Thomas Row, Swansea, SA1, 1NJ, U.K. The price is £6.75.

COMMENTARY

WE CAN ONLY BE SURPRISED

WAITING for review in a pile of books are two volumes with closely related titles: *Farming for Self-Sufficiency* and *Building for Self-Sufficiency*. Both authors (whether one got the idea from the other hardly matters) sensed the underlying longing and determination of the age, which is moral and ethical. We want to manage our own lives. Accordingly, we are redefining all our problems in philosophic terms—in relation, that is, to the yoked moral realities of freedom and responsibility.

The great discovery now coming to the fore is that freedom is the creation of responsibility. One *cannot*, moreover, have one without the other. This is the point of Taylor Stoehr's essay on Paul Goodman: "If one did not look to the state for solutions, one might discover them for oneself." This rule is now seen to have universal application. In a paper presented at a seminar on health, held in June in Uppsala, Sweden, Valentina Borremans maintains that whatever restricts autonomous action by individuals reduces the possibility of human health. The freedom required for health is by no means the automatic product of having plenty of goods and services for all. This familiar conception of "prosperity" is an ambiguous ideal. The writer says:

Commitment to equity without social austerity leads to an unhealthy distopia. The utopia of health based on well-distributed tutorship of everyone from birth in the hospital shopping in the supermarket, to death under intensive care—this utopia seems to me neither feasible nor attractive. Equally distributed affluence can suffocate people equally. Whenever affluence—however well distributed—passes a certain volume, the intensity of autonomous coping with the environment—which is health—must decline. The attempt to distribute unlimited affluence equitably must lead to egalitarian slavery—call it patienthood—in a worldwide hospital ward. . . .

I believe that in a modern society health will be high when two conditions are met:

1. When society distributes equitably what it produces; and
2. When society produces just barely as much goods and services as are needed to equip people equitably with the tools they need for the most effective level of autonomous action.

In other words, health, social welfare, political freedom, individual well-being, cultural richness, and even human maturity are all aspects of autonomy—and autonomy is a state of freedom for action, not a goal definable in finite terms. The less dependent a social or individual organism is, the more health it manifests.

Most of the good books published these days are concerned with various means of making this process work. Whatever interferes with it is anti-human activity. Valentina Borremans puts it this way:

The intensity of autonomous action today depends upon a balance: . . . Where commodities and their consumption prevail, autonomous activity will be low. Where industrial output is mainly limited to tools for autonomous action, health levels will be high—conceivably higher than in any pre-industrial or industrial society. This much we can say about the intensity of health: by the style that convivial health shall take in any convivial culture we can only be surprised.

CHILDREN ... and Ourselves PIAGET'S "EQUILIBRATION"

EVERYONE who has read or tried to read Piaget knows that understanding him is difficult. What is not so clear is *why* he is difficult. There are probably two reasons. One would be that he writes in the special vocabulary he has evolved to give an account of how human intelligence manifests and develops in the growing child. The other reason is philosophical: the substance of his thinking is shaped by an attitude toward the human being which has little in common with conventional views of human nature and ideas about learning, making it difficult to sense the reality behind what he says. The special language we can learn, if we need to, but to see human beings in another light is not so much learning as a matter of discovery and stance. Erich Fromm somewhere speaks of the necessity of a "therapeutic leap" on the part of a troubled person who wants to get well. Some kind of leap is involved in grasping Piaget's essential meaning.

These reflections are the result of some reading in the scores of papers collected in *Piagetian Theory and its Implications for the Helping Professions*, a book embodying the proceedings of the sixth annual Interdisciplinary Conference sponsored by the Childrens Hospital of Los Angeles and several university affiliates. The editors are James Magary, Marie Poulsen, Philip Levinson, and Priscilla Taylor. Copies (\$10) may be obtained from the University of California Bookstore, University Park, Los Angeles, Calif. 90007.

One contributor, John Glanville Gill, shows why some sort of leap is necessary. He begins with the conventional idea of learning, taken from Locke and Bacon:

Locke's three-point theory assumes that for knowledge to occur there must be (1) *a fact*, something in nature to start the process, (2) *an observation*—a sense impression by which the

external thing impresses itself on an organ of sensation, and hence on a brain, and (3) *an idea* formed in somebody's brain, but projected 'out there' where the external event was supposed to take place.

From the assumption that knowledge consists of facts impressing brains, Bacon and Locke moved on to the facile theory that science, both historically and individually, consists of merely the accumulation of facts. From this, both Bacon and Locke, and with them many of our contemporaries, reasoned that the student starts empty, like a blank tablet, an erased slate, an empty vessel. Therefore, it follows that some knowing wise fount of learning should fill these empty pots with useful knowledge, therefore authoritarian education, and all the deadly speed-up of our times. . . . this view became absurd within a century of its popularization, but somehow survives as a dangerous ghost, creating confusion, even disaster in education, and the human sciences.

Knowledge, Piaget makes plain, is not a collection of facts but a structure of knowing which is alive and active and growing, achieving one moment of equilibrium after another. Knowledge is not a great mosaic we are putting together, but more like what makes it possible for a handball player to stay in the game: he knows through developed structures, muscular and neural, what he must do to keep the ball in play.

"Knowledge," says Mr. Gill, "properly understood, is epistemic structure." The consequences of this view are far-reaching:

From the concept of epistemic structure, I suggest and I hope prove, two broad and very general propositions, (1) *there is no false knowledge!* Where knowledge is used in such a broad sense as to include so-called "false knowledge," the word becomes a sloppy synonym for *opinion*. Knowledge, on the contrary is a value, the highest value in education, perhaps in life itself. The Lockean view, which fails to distinguish knowledge from opinion, cannot tell the difference between education and opinionation part of the tragedy of the modern school system.

A second, very broad proposition shows, on the basis of the structuralist position which I have developed, that (2) *the skeptical claims of Hume and his followers become absurd and untenable*. As thus put together, everything we can know falls into one of two well-defined types, the *possible*, which includes all the arts, and the *necessary*, which is demonstrable

science. The argument shows, contrary to Bacon, Locke, and much current education, that the great arts are not ornaments or frills, but fundamental exploration, road-breakers in the same enterprise as the true sciences.

The keynoter of the conference was Hans Furth, author of *Piaget for Teachers*, who stresses the need for philosophic understanding of the French psychologist:

Piaget's theory has been around for many years and its influence on the psychological and educational profession is beyond dispute. Unfortunately, the same cannot be said for philosophy which has very well managed to take scant notice of the theory even though Piaget's explicit aim is an attempt to answer straightforward philosophical questions such as: What is the nature of knowledge? or What is the relationship between knowledge and reality? This benign neglect of philosophers is significant because it tells us something about the level of acceptance accorded to the theory by those who profess to do so. After all, philosophy reflects prevailing currents of thought. If the superficial popularity of Piaget were matched by a deeper understanding of its implications this would occasion philosophical reflections as is the case with Freud or more recently with Chomsky.

Only a "strong theory," Mr. Furth says, "about the nature of intelligence can give substance to the concept of intellectual health."

Piaget's is such a theory and it is in this connection that in my opinion, it can make its most important and practical contribution to education. However, to do so, one must consider the more basic theoretical implication of Piaget's work. Consequently my preliminary aim will be to clarify what Piaget considers the most fundamental process of intelligence in action, to which he has given the name "equilibration."

You are no doubt familiar with the word. If Piaget insists that this is his most important concept, would it not be prudent to be skeptical about the value of work that claims to apply Piaget's theory and yet has no need for using the concept, or what is worse, represents a theoretical model which is in conflict with Piaget's concept of equilibration? The reason why this concept is more than usually difficult to grasp—all of Piaget's concepts are difficult because they presuppose an unaccustomed philosophical perspective—is the paradox implied in the familiar saying: "The more you know, the more you know how

much you don't know." Equilibration is meant to describe this state of affairs and do more than this. Not only does intelligence lead to a structure of knowledge and to a structure of disturbing "ignorance," but the vital balance between these two poles is the internal condition for a continual restructuring of the knowledge. In this sense equilibration is the key to intellectual development.

The handball game does seem a good illustration. The active player is always in equilibrium or always regaining it. Intellectual capacity is really the same thing at another level. Capacity is knowing how to do things, and for the mind this is knowing how to think. So, Piaget is challenging in that he proposes a means of teaching people how to think.

Should the schools do this? Mr. Furth has an interesting comment:

For instance, learning to read or reach a performance criterion in a certain subject is more frequently than not an inappropriate occasion for high-level thinking. Hence my reaction to the question "Should schools be concerned about fostering intelligence?" would be as follows. As a psychologist I reply with a definite and deliberate "yes?" and will point out the various psychological benefits that could result from this step. But as a citizen I realize that the school is an institute of the society and the decision to educate children as thinkers implies a value judgment that goes far beyond psychological expertise.

This book is heavy, academic, but has in it the life of a real inspiration. Intelligent concern comes through despite the language of specialists.

FRONTIERS Plans for Winona

THE book, *Winona: Towards an Energy-Conserving Community*, is the fruit of a what-is-and-what-might-be project carried on during 1974-75 by twenty-one students of the Energy Design Studio, School of Architecture and Landscape Architecture, University of Minnesota, Minneapolis. Their aim is to show what the application of energy-conserving technology could do for an existing city of 27,000 population. The impressive thing about this study is the feeling of reality it gives the reader: that the various proposals made by the student authors could be made to *work*. They completed a careful on-site study of this Upper Midwest town on the shore of the Mississippi, took pictures of areas where changes were plainly in order, then worked out their proposals, using models (also photographed) to show how the reconstructed areas would look (with drawings to indicate plan and function).

Consideration was given to the effect of rising energy costs on systems of transportation, food production, shelter, and communications, and consequent effects on people and their neighborhoods. Discussions were held with the Winona Planning Commission and the Winona Chamber of Commerce and the public was invited to several open meetings.

However, this project does not pretend to be a blueprint for Winona or any other community. It does present a possible direction for the city with its evolving physical, social, and economic needs in an era of dwindling traditional energy sources.

Not all energy-conserving methods are fully tested and improvements are constantly being made. Moreover, developments are taking place at such speed that there can be gaps in communication while new techniques are being investigated. This project is therefore aimed at stimulating thinking and planning at all levels. It emphasizes what individuals and neighborhoods can do by themselves, without fighting city hall; it shows possible ways an entire community can change creatively; and it demonstrates that a better quality of life is possible with less energy consumption.

Using the best sources on practical innovation in various directions—the Portola Institute's *Energy Primer*, work done by the Oregon Office of Energy Research, The New Alchemy Institute, and various others the authors present figures and graphs showing why change is necessary, and then give essential information (with good, brief bibliographies) on the available alternatives in solar, wind, recycling, and agricultural technologies. The rest of the book—nearly a hundred pages—is devoted to applications of these means of local self-sufficiency to selected areas and problems of Winona.

The book does this, and does it well, but a further accomplishment is of equal importance. *Winona* is a fine example of the transfer of initiative from political institutions to people. When the book came in (as a gift of a reader in Winona), it stirred the question: How many other schools of design or architecture and planning are doing this sort of thing? The question is not easy to answer, off-hand. But even one or two such books are good evidence of the progressive relocation of responsibility for change. In the high Middle Ages Aquinas said that "building cities is the duty of kings," but in our time rebuilding them has plainly become the duty of the people. When this duty is more widely recognized, the changes will come; some are already on the way. The changes will express new and better ideas concerning the function, form, and mood of urban centers.

Whitehead remarked in *Adventures of Ideas* that "In each age of the world, distinguished by high activity, there will be some profound cosmological outlook implicitly accepted, impressing its own type upon current springs of action." If you look at a book like *Winona*, you see in it the images which flow naturally from a new cosmological outlook. They represent cooperative relationships with the world about us. They do this without highflown rhetoric or pompous declarations; the outlook is simply there.

In *Matrix of Man* (Praeger, 1968), Sibyl Moholy-Nagy says:

Although towns are inanimate, they assume the characteristics of their creators. Men create and destroy values with equal intensity. . . . Cities, like men, are embodiments of the past and mirages of unfulfilled dreams. . . . Human existence is a continuous regrouping of matter and ideas. . . . This regrouping of things and meanings is most visible at their deepest points of concentration—the cities.

Buildings reveal the ideas held by men at a given time. Showing a Parthenon-like bank built in Philadelphia in 1824, Sibyl Moholy-Nagy remarks: "The identification of banking and temple architecture is based on Hellenistic precedent, established when private property for the first time attained that quasi-religious significance it still has in the United States." To go from this monument of America's "faith" to the models shown in *Winona* is to recognize at once the very different focus of present-day aspirations and energies. For example, an imposing monastery near the city, vacant for five years, is conceived in the plans as the dwelling of a community group that would use half the accompanying 100 acres for farming, the rest of the land for grazing, wildlife, and recreation, with provision in the main building for aged and handicapped persons.

In a section on Neighborhood Change, the writer says:

Neighborhoods can organize for change. In Washington, D.C., recently, a neighborhood pooled its skills in the old barn-raising tradition to renovate its housing. . . . A vital element in future neighborhood change will be the locally based and locally oriented architect—who knows the city, lives with the climate, knows specific neighborhoods and knows the people who live there. Much of his work will consist of renovating existing houses with natural energy systems, and building between houses. He may also be asked to redesign the interior of an entire block, whether for a day-care center, farming, aquaculture, or commercial use. He may design neighborhood power stations, both solar and wind generated.

Following is the proposal for an eight-block neighborhood, close to "downtown" but mostly residential:

The valuable urban space now taken up by streets and parking would be made available for gardens, bikeways, and walkways. The scale of the neighborhood makes walking a perfectly reasonable way of getting about. The introduction of food-processing plants, as well as gardens, would reduce transportation, storage, and packaging and allow the daily harvesting and sale of fresh vegetables during the growing season. In-filling between houses would reduce heat loss during winter. Solar collectors and wind generators could be built which would serve the entire neighborhood and reduce the demand on the city power system.

All such proposals are illustrated with plans and photographs. We look forward hopefully to the appearance of other books like *Winona*. This one may be purchased from the University of Minnesota for \$5. Write—Publications: *Winona*, University of Minnesota, 2818 Como Ave., SE, Minneapolis, Minn. 55414.