VOLUME XXVI, NO. 23
JUNE 6, 1973

SANITY IN WORK

POWER, as we know, has long been the chief objective of both reform and revolutionary movements. For power is believed to be the only means by which just conditions are established. Without power, the argument goes, the hope for justice must remain a utopian dream. But that power, once obtained, becomes an obstacle to the goal of just relationships, makes an engrossing social study, and accounts for the growing interest in the anarchist approach to the just society. The problem of the anarchists is to make the hunger for power as irrelevant emotionally as it is in anarchist theory, since a great many anarchists still regard themselves as revolutionists, committed to unseating all forms of power which are used to control the lives of other people. One could say that this sort of anarchist looks forward to one supremely effective political act of revolution that, by reason of its far-reaching character, will put an end to all subsequent power politics. For in principle, the anarchist is opposed to every sort of political manipulation. The conception is of one, great political *Götterdämmerung,* after which the Golden Age can begin.

Whatever the defects of this reasoning, anarchist thinkers are unquestionably among the best social critics we have available, since their dream of a society made up of autonomous, self-reliant people is an inspiring one, no matter what practical problems it may neglect, and anarchist writers have no stake in any conceivable system or ideology. This gives them both vision and clarity. One need read only Kropotkin to become persuaded of the genuine altruism and often the practical wisdom of great anarchist thinkers and writers.

However, something is happening in the modern world which may, in time, lead to a rather complete redefinition of the questions and issues which are raised in connection with all such problems. There is beginning to be recognition of the fact that the most pressing ills suffered by a great many human beings are of a kind that power is impotent to correct. This recognition is coming at various levels. Ordinary power—the power to coerce, that is, which arms states and governments—can obviously do practically nothing to put an end to war. The reason for this is that the only real way to end war is to abandon the tools of war, to jettison or destroy the very means of making war, and this would of course end military power. However, getting power in order to get rid of it is not a pursuit that will attract very many people. It seems more reasonable to refuse to have anything to do with it in the first place. Accordingly, the ranks of those who make this refusal are swelling, year by year.

Another recognition that is growing can be expressed by saying: It is not what a person has that is important, but the way he lives. For hundreds of years, justice has been commonly defined through comparisons of what or how much people get or have. But now, not only justice, but *meaning* itself, is increasingly measured by how people feel obliged to use their time, what they work at, and whether or not they are *able to do* what seems worthwhile and real to them. The activity, not the reward, is the thing. It is not that compensation for work has no importance—which would be a silly claim—but that the work is beginning to be seen as more important than the compensation.

What does this mean? It means that doing insignificant, meaningless, or actually hateful work simply cannot be paid for sufficiently by any amount of money. Money cannot compensate a man for wasting his life. Whether or not this realization is made possible by modern "affluence"—since having plenty of money, or more than enough, leads to the discovery that

what people hope for from life cannot be bought with money—is really beside the point. The fact is that money cannot be made into a substitute for what a great many people long for with all their hearts. What, then, becomes of the idea of "justice" as the proper or equitable distribution of wealth? The goal of wealth, in short, is being recognized as an ideological fraud. Wealth is no longer seen as a means of either personal or social realization.

So long as proper distribution of the fruits of toil could be regarded as the foundation of justice, it was reasonable to regard power as a legitimate tool of the social struggle. But when the ideal becomes, instead, the individual self-definition of work, with chosen work as fulfillment, then political organization as the means to power becomes almost meaningless. Another kind of human association—what people speak of as "community"—takes the place of the organization of men for power-gaining purposes.

To illustrate this new kind of thinking, we need to look at the example of its pioneers, one of whom was Eric Gill, the English stone carver and typographic designer. Gill was born in 1882 and trained as an architect, but he left this profession early, taking up lettering, a skill which he incorporated with his stone-cutting. Meanwhile, he was thinking about how a human being ought to spend his time. In a fine essay on Gill, Herbert Read (in A *Coat of Many Colours*) remarks that although Gill was commonly called an "artist," his whole life "was a protest against the distinction between the artist and the ordinary man." While he began as a socialist, through the Fabian Society, he discovered that it lacked a true reforming inspiration. The socialist movement, he said,

> was not moved or led, still less could it be said to be inspired by any ideas of man or man's life or of man's work other than those of the capitalist world against whose injustices and cruelties it was in revolt. . . . Socialism as a political movement is hardly more than an attempt to re-order the distribution of factory products and factory profits.

In *Art and a Changing Civilization*, Gill wrote:

> It was the peculiar achievement of the nineteenth century to separate, in thought and in practice, the idea of work from the idea of art, the activity of the "workman" from the activity of the "artist," and to make the artist a special person, removed from and exalted above the common ruck of beings, a sort of priest, the expert in a mystery, a mystery not of craft or trade unionism but of spiritual remoteness.

Anticipating present-day attitudes, he said:

> My socialism was from the beginning a revolt against the intellectual degradation of the factory hands and the damned ugliness of all that capitalist-industrialism produced, and it was not primarily a revolt against the cruelty and injustice of the possessing classes or against the misery of the poor. It was not so much the working *class* that concerned me as the working *man*—not so much what he got *from* working as what he did *by* working.

Gill made himself an exceptional craftsman whose carvings were much in demand. His fundamental creed was that the designer and the craftsman should be not two persons but one. The sculptor himself, he maintained, if he designs in clay, should execute his own work in marble. Read sums up:

> Lettering, type-designing, engraving, stone-carving, drawing—these activities which had brought him fame were so many by-products of his real activity, which was "to make a cell of good living in the chaos of our world." Every step in his life was governed by that aim. He gave up architecture and took up the more modest craft of lettering because it seemed more compatible with a good way of life; he left London and helped to found an ideal community at Ditchling, and when the life at Ditchling was spoiled by unwelcome publicity, he went into the wilds of Wales. When life in Wales became too difficult, he came to Buckinghamshire and found what he wanted—a quadrangle of decent English brick buildings—"the only decent way to live"—and stayed there till he died [in 1940].

Gill was convinced that the fundamental remedy for the acquisitiveness of the world lay in religion, and he became a practicing Catholic, but at the same time, Read says, "a fierce critic of the

timidity and hypocrisy of his fellow-Christians." He stayed entirely clear of politics, believing that it was made up of "pretended quarrels and dishonest commercial schemes, having no relation to the real interests of peoples, neither to their spiritual nor their material welfare, and conducted upon no principles other than momentary self-interest."

It is of particular interest that today there are thousands of people who are deliberately trying "to make a cell of good living in the chaos of our world." The spirit of the times is caught in a couple of sentences in Ray Mungo's book, *Famous Long Ago:*

> Here's a lesson I honestly believe I learned in my lifetime: ideals cannot be institutionalized. You cannot put your ideals into practice so to speak, in any way more "ambitious" than through your own private life.

We spoke of the recognition coming at several levels. Here is a passage from a lecture given last year at Plater College, Oxford, by E. F. Schumacher:

> Efforts to improve the work situation never can lead very far as long as the nature of the work itself is mindless and stupefying. All too often, the workers resist them, because the only thing that makes their work tolerable at all is that it allows them to become machines themselves. They get habituated by way of self-defence and in an effort of self-preservation.
>
> "Life is something I don't see half enough of," said a thoughtful and sensitive worker. "Perhaps I shall see more soon because I don't intend to stay in the factory much longer. I shall not be missed—nobody is ever missed. But what of him who takes my place? Will he stick it? If he does, he will receive at the end of fifty years a gold watch—then he will be able to measure in retrospect the time he's wasted."
>
> With regard to humanising the work process itself, the immobilism of present-day society is well-nigh total. As I said before, the kind and quality of work to be done is implicitly taken as given, somebody has to do it whether we like it or not. The time has come to question this implicit assumption and to attack this immobilism. Mindless work is as intolerable in a society that wishes to be sane and civilized as filthy air or stinking water, nay, it is even more intolerable. Why can't we set new tasks to our scientists and engineers, our chemists and technologists, many of whom are becoming increasingly doubtful about the *human relevance* of their own work? Has the affluent society nothing to spare for anything really new? Is "bigger, faster, richer" still the only line of development we can conceive, when we know that it entails the perversion of human work so that, as one of the Popes put it, "from the factory dead matter goes out improved, whereas men there are corrupted and degraded"? . . . and when we know that it also entails environmental degradation and the speedy exhaustion of the earth's non-renewable resources?
>
> Could we not devote at least a small fraction of our research and development efforts to create what might be called a technology with a human face?

Who, one wonders, can be expected to hear an appeal of this sort? Not, surely, the people at Cal Tech or MIT, nor the authors of the report by the Commission of the American Academy of Arts and Sciences on the Year 2000. Not, that is, the elites of planning and research about the future, who seem to be convinced technocrats, almost to a man. Nor are think-tank experts such as Herman Kahn and Anthony J. Weiner, who also published a study on the future, *The Year* 2000, likely to be responsive. Kahn and Weiner look to greater affluence in the future, increasing industrialization, with the "institutionalization" of change the rule in everything, especially in research, and a more "sensate" culture for all—if, indeed, that is conceivable. More and more it becomes plain that the initiation of change along the lines called for by Mr. Schumacher must be an informal and quite unofficial undertaking, since the managers of the existing society—certainly the high-level managers—are unable to think in the terms of Mr. Schumacher's analysis. He is calling for a *"sane* society," and his subject is work in a sane society. He can hardly be understood except by those who have already found some threads of sanity to follow in their lives.

Mr. Schumacher opened his address by quoting an article in the London *Times* which began with these words:

> Dante, when composing his visions of hell, might well have included the mindless, repetitive boredom of working in a factory assembly line. It destroys initiative and rots brains, yet millions of British workers are committed to it for most of their lives.

The rest of his paper is an expanded comment on this casual indictment of the industrial system, followed by some suggestions for a remedy. He says at the outset:

> The remarkable thing is that this statement, like countless similar ones made before it, aroused no interest: there were no hot denials or anguished agreements; no reactions at all. The strong and terrible words—visions of hell—mindless, repetitive boredom—destroying initiative and rotting brains—millions of British workers, committed for most of their lives—attracted no reprimand that they were misstatements or overstatements, that they were irresponsible or hysterical exaggerations or subversive propaganda; no, people read them, sighed and nodded, I suppose, and moved on.
>
> Not even the ecologists, the conservationists, the doomwatchers and warners are interested in this matter. If someone had asserted that certain man-made arrangements destroyed the initiative and rotted the brains of millions of birds, or seals or wild animals in the game reserves of Africa, such an assertion would have been either refuted or taken as a serious challenge. If someone had asserted that not the minds or souls or brains of millions of British workers were being "rotted," but their bodies, again there would have been considerable interest; after all, there are safety regulations, inspectorates, claims for damages, and so forth. No management is unaware of its duty to avoid accidents or physical conditions which impair workers' health. But workers' brains, minds and souls are a different matter.

The fact is that the prevailing practice in our civilization makes it clear that there is no serious belief in souls. No matter what we say on Sunday, or what declarations are made by statesmen on national holidays, we don't think very much of souls, or minds, either, except as they prove able, in the role of butlers or manipulators, to get more pleasure or work out of all the bodies. It is notoriously true that most jobs are boring and sometimes sickening, but no one, as Schumacher points out, plans to do anything about it—no one, that is, except the rebels who drop out from as much of the civilization as they can manage to get along without.

The only hope of a remedy, in conventional terms, seems to lie in the expectation or possibility that, with the further progress of technology, more and more of this dull, burdensome work can be turned over to machines, eventually freeing people from work altogether; and then the problem will be to "teach" them how to use their leisure time "constructively." There are probably dozens of doctoral theses already gathering dust on the subject of "education for leisure." But none, meanwhile, on the redesign of work in behalf of the humanity of the worker. As Schumacher says:

> It is not as if there were any lack of studies and reports on productivity, on workers' morale, workers' participation in management, and so forth. But they do not seem to germinate any fundamentally new thinking; they do not raise questions about the validity or sanity of a *system* which destroys men's initiative and rots their brains. They all—although in varying degree—start from the implicit assumption that the *kind* or *quality* of work to be done in society is simply what it is: somebody has to do it, if it is soul-destroying work, that is regrettable but unalterable; if people do not like doing it, we pay them more and more until enough people like the money more than they dislike the work But, of course, this economic solution of the problem—paying what the law of supply and demand prescribes—is no solution from our point of view; some people, as St. Augustine observed, even take pleasure in deformities, and many are prepared—or they are forced—to ruin themselves for money. We are concerned with the fact that our *system* of production, in many of its parts, is such that it destroys men's initiative and rots their brains, and inflicts this damage not on a few people by way of exception, but on millions of them by way of everyday routine. Why men or women tolerate and accept it against pecuniary compensation is quite a different question.

It may be a different question, but it is certainly germane to the understanding we need of why it is that, today, there are more and more people who are *refusing* to accept money for doing what goes against the grain of their being.

Perhaps we should say that only recently have people begun to think of themselves as actually capable of living their own lives. Perhaps some kind of "evolution" is going on, under the impetus of which the life of the mind, and something not inappropriately called the "life of the soul," are felt to be more important than anything else. And for those to whom this change comes, there is undeniable necessity to change the kind of work they do into activity that fits and belongs to their lives and intentions.

As an economist personally engaged in the study of work and the fruits of work, Mr. Schumacher has been thinking about these things for some twenty years. He has made himself an agent of change by working to assist in the development of tools which have a freeing effect on people. There are also tools—usually complex machines and systems of machines—which tend to enslave the people who operate them. Such machines are "tended" rather than operated, and their demands dominate the lives of the workers who serve their needs. But tools which increase instead of minimize human capacities, which serve the intentions of men instead of the requirements of systems, can be liberating to people by extending their energies without absorbing their lives. Mr. Schumacher has formed the Intermediate Technology Development Group, with headquarters in London (9 King Street, Covent Garden, London, W.C. 2, England), which concentrates on the design and promotion of tools and machinery which will help people to remain their own masters while becoming efficient producers on a small scale—a *human* scale. The primary inspiration for the work of the Intermediate Technology Group came from the need of people in countries with little industrial development for simple implements and productive equipment, requiring neither high capital outlay for their purchase nor extensive organization for their use. Again and again it has been shown that in certain fields, small-scale production can be as efficient as that of enormous factories, and this sort of equipment could be immeasurably useful in underdeveloped lands. But it is now evident that there are also many persons in highly industrialized countries who would like to develop "technology with a human face." Schumacher speaks of a production unit the Group has developed which costs one fiftieth of the investment required by the smallest unit previously available in that field. As he says:

> Think of it: instead of one unit requiring for its efficient operation a vast and complicated organisation, we can now have fifty units, each of them "on the human scale," each of them large enough for a few enterprising people to make an honest living, but none of them so large as to make anyone inordinately rich. Think of the simplification of transport if there can be many small units instead of one large one, each of them drawing on local raw materials and working for nearby local markets. Think of the social and individual consequences of such a change of scale.

Well, this is one way to help transform the way men spend their lives, by enabling them to have greater freedom in determining what they shall do. This sort of change becomes possible through simplicity, smallness, and, Schumacher would add, non-violence. To have a sane society, the work people do must express their sanity, which means their own judgment, their own choices, their own quality. The humanization of work will take time, like every other good and necessary thing that needs to be done. But it will take a surprisingly short time if everyone uses his imagination to make his own work an expression of sanity.

REVIEW
THE CRAFT OF WEAVING

IN our time, "community" has become the metaphor for practically everything we long for but seem unable to have. The synthetically constructed communities, which hope to capture the spirit of what has been lost, often do not work out very well. Perhaps community, like "happiness," cannot be had through any direct attempts to achieve it. We may need rather to learn how to do the things of which community is a natural result.

There is a clue to these things in William Barrett's *Time of Need:*

> Our civilization still rests today on the great discoveries made by early man: how to plant seeds and till the earth, how to weave cloth, fire pottery, and smelt metals. . . . I am unable to do any of these things. If civilization were to founder, I would not even know how to set about rediscovering these arts. I have planted, but the seeds were bought in a store; imagine beginning with grasses in the field, sifting out the proper strains until eventually one got the seeds of wheat. Walking out of doors I occasionally pick up curious stones, but I don't know which are metallic and haven't the least idea how I would go about extracting the metal if it were there. And the leap from flax to cloth is beyond my imagination. Dear reader, do not be blasé and underrate prehistoric man before you ask yourself whether you too could accomplish what he did. On this point the intellectuals of the Enlightenment were very rude guests: they lived in the house that archaic man made possible for them, ate his bread, used his metal in their forks and knives, wore his clothes, drank his wine—and all the while scorned him as a creature of darkness.

Well, we are still rude guests, but beginning to wonder about a great many of our conceits, and a deep hungering for the sort of knowledge Mr. Barrett admits he doesn't have is affecting more and more people. So, the times they are a-changing. Just possibly, the people who are bringing back this lost knowledge are more important as change-agents than anybody else.

This idea is a result of dipping into *The Textile Arts*, by Verla Birrell, said by the publisher, Schocken, to be "virtually the most complete guide to textile history and techniques available." We can hardly testify about that, but the weavers we have shown our review copy to can't wait to get their hands on the book. The sub-title is *A Handbook of Weaving, Braiding, Printing, and Other Textile Techniques.* It is an enormous paperback of more than 500 pages, filled with illustrations, and sells for $7.95.

Reviewing this book is of course impossible for us, since we are exactly in the condition described by Mr. Barrett. But we've been reading Miss Birrell's comprehensive study with growing enjoyment. The subject is so basic. Food, shelter, and clothing are the areas of the practical arts, and we are beginning to believe that no one should pretend to know much about the fine arts until he has working knowledge and passable skill in at least one of these practical arts, and a fair understanding of them all. We need to become Renaissance people all over again, and this means growing into generally competent human beings—being able to do all the essential things for ourselves—and then, after we've made this much recovery, we'd be better able to make some sensible decisions about what to delegate to technology and what to keep on doing for ourselves.

And *then* we could have another look at the fine arts, to see what they mean and if they need any further attention. Probably, they wouldn't.

Miss Birrell is not only a practitioner, but also an archaeologist and historian in relation to textiles, and the early chapters of her book give an altogether fresh feel to the study of history. The origin of weaving is lost in the mists of prehistory. A cuneiform tablet found at Ur of the Chaldees shows that there were weavers there about 2200 B.C. Egyptian wall paintings portray weavers at both vertical and horizontal looms about 2500 B.C. Scraps of cotton cloth have been preserved in association with copper in the remains at the

ancient site of Mohenjo Daro, in the Indus valley, dating from a similar antiquity. The linen found in Egyptian tombs built in the third millennium B.C. is finer cloth than any linen today, with 540 threads to the inch, 60 inches wide, and six or more yards long. Silk production is believed to have begun in China at about the same time. Ancient Greek and Egyptian weaving methods are compared by Herodotus. The Romans appropriated the crafts of those whom they conquered, bringing Greek weavers to Rome and sending Coptic weavers to Gaul; by these means, weaving centers were established throughout Europe.

The pre-Columbian civilizations in America had advanced skills in the weaving arts. Miss Birrell writes:

> In Peru, painted vases found in ancient caves picture women weaving on two-bar back-strap looms. Because the coast of Peru has such an arid climate, many beautiful fabrics which were buried there long ago have been recovered intact. Intricate tapestry and other weaves, embroideries, needle knitting, knotting, and other textile techniques taken from these tombs never cease to amaze specialists. Practically the only types of weaving not known to these ancient Peruvians were the Oriental knotted-pile weaves. Cloth several yards wide and 20 or more yards long has been found in mummy bundles. Brown and white cotton, llama and alpaca wool, and some sisal-like fibers were the principal textile fibers used.

England's first weavers were brought there-by the Romans. Later, laws and persecution caused weavers to migrate to England. When Louis XIV revoked the Edict of Nantes, renewing the oppression of Protestant sects, some weavers fled to Flanders while others migrated to England and America. In this way, the foundation was laid for England's industrial revolution, as the mechanization of textile manufacture began in England, mostly in the eighteenth century. After the American Revolution, more technical knowledge was brought to the United States by European weavers seeking new homes. Then came the inventions which made weaving an industrial process in the United States. Miss Birrell comments:

> Although improved machinery does increase the output of woven fabrics, it does not necessarily improve the quality of these fabrics. The charming character of hand-woven fabrics cannot often be duplicated in machine-woven fabrics. A reevaluation of the merits of hand-woven cloth has probably been an important factor contributing to the current renaissance in hand weaving. More and more people are taking up hand weaving as a leisure-time activity. Between 1940 and 1950 the number of people engaged in hand weaving in the United States doubled. It is estimated that some 300,000 hand looms are now in operation in this country.

The early chapters deal with various methods of spinning yarn or thread and the many kinds of looms that have been used, throughout history. Spinning involves four processes—pulling the fibers out into a desired length, stretching the fibers, twisting them, and finally, winding them. In preparation for spinning, the fibers are combed to separate the longer from the shorter ones, then carded to align them in the same direction. They are then ready for spinning, which converts the fibers into yarn suitable for weaving by the single, double, or even more complex twist given the strand of fiber. Historically, there have been dozens of different ways of spinning, all of which Miss Birrell describes. Pictures on old Grecian vases show how the Greek women did it. "At the present time," Miss Birrell says, "Indian women in Ecuador, Peru, and Bolivia may be seen walking along the highways and byways, spinning as they go; their distaffs [carrying the prepared fibers] can be seen under their left arms, while at the right side a spindle bobs up and down in the air."

> Many textile specialists today are of the opinion that the spinning wheel was invented in India as part of the cotton complex of that area of the world. The spinning wheels used today in India are practically the same as those used in ancient times, except that the wheels today are equipped with a hand knob on one spoke of the wheel which facilitates turning the wheel. Some wheels today are said to be equipped with drive shafts. To use this wheel, the spinner sits on the ground and propels the wheel with one hand while attenuating and twisting the yarn with the

other. The Indian spinning wheel is placed on a T-shaped base at right angles to the ground. The spindle is at the heavy end. It is turned by a belt connected to the wheel. A belt running around the outside circumference of the wheel also passes around a horizontally placed spindle located at the narrow end of the base. The revolving wheel rotates the spindle. Similar wheels were, and are, used by the spinners of Egypt and of the Near East. The spinning wheel of India was adopted by European spinners, but since the spinner in Europe usually sat upon a chair to spin, the wheel had to be raised to a convenient level, the base was therefore set upon high leg supports. The European version of this spinning wheel became known as the Jersey wheel.

We've all heard of the "spinning jenny," developed in England, but not many know that the mule spinner, which came soon after, was so named because it was a cross between the jenny and the water-frame process. Then came the steam-operated mule, which did the work of a thousand hand spinners. The three chapters on looms describe and picture every type of loom and the various operations possible on each. The remaining chapters deal with the basic weaves, the varieties of nonwoven fabrics, embroidery and needlework, dyes and dyeing, textile painting, and textile stamping and printing. At the end there is a glossary of many pages, which is of great help in understanding some portions of the text.

The chapter on dyes is especially interesting. It describes the dyes used by the ancients, telling how they were made, and provides a list of all the important natural dyes. A technical section describes the properties of dyes and the methods of applying them. There are also extensive counsels to teachers who are looking for suggestions of simple things to do with children.

We should add that the chapters on looms also include plenty of material that teachers can use, with illustrations of simple loom devices that anyone can make.

Finally, a book like this is likely to inspire many people to become amateur weavers.

COMMENTARY
THE HOST OF COMMUNITY

WENDELL BERRY'S critical remarks about "intentional communities" (see page 6) recall Tolstoy's similar apprehensions concerning the communities formed to practice the ideals he had himself preached. "To withdraw into a community, to live this community life, to preserve in it a certain innocence—all this is a sin, an error!" Tolstoy exclaimed. He was nonetheless delighted that the communitarians had adopted what he held to be a true Christian life, and he corresponded with them. Yet he continued to say: "If one wishes to purify oneself, it must be done with others without separating oneself from the rest of the world." Later, when the communities began to fail, he wrote:

> If the communities break up, it is because the men composing them have outgrown them. They have burst through the envelope no longer large enough to contain them. I rejoice in consequence.

Today, the impulse to form communities is continually renewed. Is this an "escapist" tendency? It doubtless is with some, but others are seeking community life in order to take on responsibility, not to avoid it. So a blanket judgment won't apply. "Flight from the City" now makes sense to an increasing number of people, and when they know what they're doing, these people are reclaiming responsibilities denied to them elsewhere. They may be equal to them, or they may not; they'll find out sooner or later; but failure is not final. After all, the first American colonists who "escaped" from Europe needed a generation or two to become really independent. They would have starved without food ships from England.

There can of course be dreamy expectations in talk of "intentional communities." One may form the habit of praising the savor of a common life without understanding the ingredients or knowing the art of cookery involved. This can be very misleading, since the blessings of community are like the riches of maturity: no simple recipe can produce them. More goes into community than land, people, and a covenant. Moreover, the ultimate host of every community, however isolated, is the wide world, with all its imperfections as well as its occasional harbors for utopian experiment. People bring the qualities of the world.

Yet while community may not solve basic problems of conflict, it might eventually prove the most natural and spontaneous form of association, and the best way to reduce the characteristic problems of life to a human scale.

CHILDREN
. . . and Ourselves
LEARNERS AS TEACHERS

IN an attack on "testing," Arthur Pearl writes:

> . . . we establish a series of tests—that we devise for us standardize on us, operate in situations in which we feel comfortable, and on this basis we determine who is educable or noneducable. And then we spend millions of dollars—because some people think this process isn't really fair—to look for that culture-free or culture-fair test. It's a totally unrealizable goal. We don't even try to discover whether it's essential to try to find this kind of test at all. Why is it really important to start labeling kids as being dumb or smart early in the game?

This is an extract from Mr. Pearl's contribution to *Conflict and Consensus*, a collection of readings in sociology put together and edited by Harold M. Hodges, Jr., who teaches at California State College in San Jose. The book has just been published by Harper & Row.

The purpose of the testing is to facilitate dividing the children up into groups which are more or less homogeneous. According to the argument, they are easier to teach in classes of students with more or less the same ability. Mr. Pearl does not agree. You don't have to argue that all people are equal in ability to point out that our measuring devices may be poor or misleading, and that classification isn't really important "since none of us functions anywhere near capacity." But when poor or slow learners are isolated and grouped together, an automatic watering-down of the curriculum takes place, with second-class education as a result. The teachers, moreover, don't make the same effort with these children. "What's the use?" they say to themselves.

> Grouping doesn't help the educational process. Most of these kids aren't stupid, despite our judgment. They know who's being grouped with whom even if the labeling is couched inoccuously as "bluebirds." If they don't know, the other kids will tell them. They soon learn to fulfill the role expected of them and—most destructive of all—learn to believe in the "truth" of the school's judgment of them.

Practically nothing can be said in favor of classification, so far as the good of the children is concerned:

> The teachers' responsibility is to teach, but instead we engage in self-fulfilling prophecy. We decide that certain people cannot be educated, we refuse to educate them, they grow up uneducated; and we pride ourselves on our exceedingly accurate predictive index. This sorting principle puts a stamp on pupils very early in the game, which follows them all the way through the production line until they come out labeled "dumb" or "smart" because there has been very little done to change the initial judgment. This distorts the educational function—teachers are supposed to *change* persons; they are not there only to sort and stamp.
>
> To show you how important role expectation is in determining what you do in school—in Scotland, a few years ago, the IBM machine made a mistake and the school sent a bunch of stupid kids into the smart track and a bunch of smart kids into the stupid track. About a year later they discovered their mistake, and they checked to see what had happened. They found that those so-called stupid kids were acting just as if they were smart, just as if they had the innate ability to do the job—*because* the role expectation to a large extent determines what you're going to do in a classroom. If the school believes you're incapable of doing anything, you're never going to get an opportunity to show what you're capable of doing.

The measuring, Mr. Pearl thinks, is being applied to the wrong people. It is the *teachers* who are accountable, not the pupils. After his critical analysis, he turns to examples of teachers and schools which have instituted constructive changes. The most dramatic improvements have come about in schools which enlist students as teachers:

> In a residential school for delinquents and abandoned kids in Oregon, a 7-11 club has been started. The 11th graders are teaching the 7th graders. One of the things that has happened is that most of the 11th graders didn't want to go home for Christmas because they had to work on lesson plans over the holiday; the 7th graders felt the same way. The school no longer belongs to the teacher, but now the students have a stake in the system and suddenly school swings. The school is an entirely different school because the kids themselves are involved in the teaching process. And the teacher becomes

somebody who is pretty important to the kids because he is needed to help them prepare lectures and work with each other. They find they need the teacher to help work through problems, to suggest various ways of teaching, and to refer children who need special help.

In another school there was a youth who appeared to be absolutely unmanageable. He threw darts at the teacher, broke windows, was the one arrested if anything was stolen. He was not the kind of kid you would have suspected to be an optimal teacher, but almost in desperation it was suggested that he be allowed to teach. He was in the 8th grade, so he went to work helping 6th graders in spelling and 2nd graders in tumbling. Three or four weeks later, he's doing much better in all his classes because he has to keep up his work and stay out of trouble if he's going to be allowed to work with the other kids. His whole idea about education has changed. In fact, where once his life's aspiration was to be a Marine, he now wants to be a teacher.

One way of introducing student teaching is by having experimental programs with teacherless groups. In a school where Mr. Pearl was involved, it was decided to try this plan in an eighth-grade science course, in which the class members would decide for themselves what projects to undertake.

The teacher initially thought it was absolutely insane. She saw her job as lecturing for a whole hour whether anybody listened or not. She saw her primary obligation as reaching the kids who cared, and those who didn't—too bad. We prevailed upon her to break the room into groups and let them have some alternatives as to what they might like to do. They began to do things that the teacher thought only 11th and 12th graders could do. When she gave a test out of the text—in spite of the fact that they were doing almost nothing out of the text—the whole class had gone up in performance.

Why?

Because now these kids had an investment. They were working on things themselves. They had some control over their own destiny—they had some concern for their own educational process; it was no longer something forced on them. And the teacher found that teaching had become fun. She used to hate to come to school and look at the hostile faces, and the kids felt much the same way about her. Now the whole educational experience has become exciting. She's playing essentially a consultative role—she answers questions, she helps individuals—and the kids are learning as they never learned before.

There are various reactions to the program, and some wonderful side-effects. The school principal, for one, is nervous because he won't know what to say to angry parents who claim that their children come home telling about the "fun" they have in school. Meanwhile—

There are kids in that school getting A's who never got anything better than an F. Kids are participating and asking questions who before were able only to incur wrath and be sent to the principal's office where, of course, all education takes place in our system.

Actually, the school has stopped being a "school" and is a learning center where the young educate themselves—somewhat as Ivan Illich has proposed.

They're working in heterogeneous groups where they all have a chance. Moreover, the so-called dumb kids are better in some things than the bright ones; for example, when the 8th grade kids were constructing tests for the 7th graders, the bright ones made up "catch" questions that no one could get; the slower kids asked fruitful questions that made real sense—and got a big kick out of being the best test-makers. The whole school is a different school—for both teachers and students.

Readers interested in following up ideas like this might refer to *Children Teach Children* (Harper & Row, 1971) by Alan Gartner, Mary Kohler, and Frank Riessman. One learns from this book that it has been known for thousands of years that *"children learn more from teaching other children."* The book tells about different ways of planning this sort of teaching and describes the schools where it is being done. There is also a bibliography.

FRONTIERS

Sense and Portents

As part of his argument for radical measures to meet the energy crisis, Stewart Udall, former U.S. Secretary of the Interior, writing in *World* for May 8, presents some figures:

> Annual increases in oil consumption are now so enormous that in the 1970s alone the nations of the world consume as much oil as was used in the hundred years from 1870 to 1970 (and these projected global demands are scheduled to double again in the 1980s unless consumption patterns are altered). In 1972 the 6 per cent of the planet's inhabitants who live in this country used nearly 40 per cent of the total energy consumed in the entire world. Two hundred nine million Americans use about as much energy for air conditioning alone as the 800 million mainland Chinese use for all purposes—and Americans waste each year almost as much energy as the Japanese (105 million people) consume annually.

Among alternatives to present practice, Mr. Udall proposes development of methods of storage and use of solar energy, more efficient low-polluting transport systems, and exploration of the possibility of hydrogen as a fuel. He also has an austerity program for the country to reduce energy consumption.

Such suggestions are conceived at the national policy level and must await the stimulus of aroused public opinion before they can become effective. More interesting, at the grass-roots, opinion-generating level, is the rapid growth of the organic gardening movement. We have two issues of the Newsletter published by the Piedmont Organic Gardening Movement in South Carolina, with headquarters in Greer, which reflects the growing concern in this agricultural state. The contents of the issue for October of last year suggest that the group had only recently been organized, since there were then only twenty or thirty members. By March of this year, there were over a hundred members, with plenty of prospects for more. The Newsletter prints practical helps for the members, contributed by the more experienced gardeners. There are discussions of various types of fertilizers, how to use them, where to buy them, and material on insect or pest control by means of other insects. And news notes like this one:

> Mrs. Enloe reports that her peanuts didn't do anything this year, and she says it may be due to the fact that she planted them in an area of her garden high in humus. Normally, she plants them in a poorer section, and they have always done well. Bear this in mind next year when you plant peanuts. Mrs. Chandler says when the vines begin to spread, throw some dirt on them, the point being to force them closer to the ground. This way, more peduncles will penetrate the soil, and more peanuts will be formed.

In the March issue, there is this on insect and disease control:

> Our experimental gardens show that a soil high in organic material, with humus content at 5% or better, takes care of over 80% of plant problems. At 7% humus content disease is practically nonexistent, with insect pests affecting iess than 10% of the crop. This is without any controls at all! But we don't expect that the commercial farmer could apply the practices on a large scale, although we believe it is possible. Our tests have not been run on a monoculture crop, but with a varied garden. Perhaps monoculture is wrong, period. Or maybe a monoculture would work with a field rotation schedule. But then it wouldn't be a monoculture, would it? Man never wins when he tries to bend nature to his desires, but always wins when he works with nature toward his ends. Perhaps some day we will review the information collected over thousands of years and realize this. Some of us know it now.
>
> The next time someone tells you how efficient our "modern" agriculture is, tell him it is the most inefficient system ever devised by man. And it is! While it looks efficient to see the farmer perched upon the tractor, with cab, planting acres of crops, and tending same with little or no manpower, and harvesting staggering amounts from many acres, look a little beyond this pretty picture. Consider the amount of energy required for a plant to produce energy in the form of food. How much energy in the form of fossil fuel went to produce the tractor, fuel and oil for it, the attachments, the fertilizers and pesticides, plus electricity for operation of the farm, the amount of energy to operate the land grant colleges, etc., and you will find it requires almost twice the energy input to produce energy on our

present-day farms! This can't last forever, and in fact is in its last throes. Only organics, with all their problems, can get more out of a plant than is put in! Organics alone don't depend on the wasteful practice of using more energy inputs than is realized in the energy output.

Mother Earth News for March has an interview with Wendell Berry, focussing on man's relations with the land. Berry says a number of interesting and useful things in this discussion, but an aside about "communities" seems of particular importance. The *Mother Earth* man, Bruce Williamson, spoke of how people in intentional communities are trying to restore the stabilities in life that have been so largely lost. Berry replied:

> But I'm much more interested in the results of accidental communities that have formed by fate and fortune and circumstance. The intentional community seems to me a rather escapist idea, sort of a new version of the white citizen's council. I thought that's what we were trying to get away from. I think the idea that you can have an intentional community is about as misleading as saying you can have an intentional life. If you're going to have a decent and stable community, you've got to produce the cultural and social forms by which to deal with the unexpected and the undesirable. The intentional community idea assumes that when you say love your neighbor as yourself you have some kind of right to go out and pick your neighbor. I think that the ideal of loving your neighbor has to take on the possibility that he may be somebody you're going to have great difficulty loving or liking or even tolerating.

"Fashions" don't seem to play any part in Wendell Berry's thinking. Asked whether students and young people looked to him for advice, he said:

> Well, my own history as a teacher has had a rather dramatic change along those lines. Back when we were making speeches and holding meetings about the environment and against the Vietnam War, I was sort of looked on as a friend of good causes. Then last year we had a long struggle in the university about academic requirements. I was holding out for a foreign language, for instance, and overnight I got the reputation of being an "academic fascist." But I would be a lot better off if I knew more languages, and more math and biology, too. That's the message I got from my own experience.
>
> Here it seems to me you have a strange thing. You have young people who want world peace but don't want to learn anybody else's language. . . . So-called educators have allowed the idea to get around among students that education ought to be constantly diverting and entertaining. That's a terrible disservice to reality. And students then feel affronted by the hardship that's native to education and to the mastery of any discipline. . . . What I'm saying is that the young have had lots of praisers and lots of detractors but few critics—which is really a way of saying they've had a few friends.

The rest of this interview is equally interesting.