THE NEW RATIONLISM

A GOOD initial approach to both the genius and the disaster of intellectuality is available in Philip Slater's critical definition of Rationalism (in *Earthwalk*, Anchor, 1974). Rationalism, he says, is "the inability to perceive wholes." The rational approach to experience isolates its elements from the total continuum of life and defines them in terms of cause and effect. The resulting system, expressed in principles and laws, is then put in the place of the undefined continuum or whole and identified as "reality."

It is not "reality," of course, but some sort of reflection of ourselves, or of our mental processes and interests, in the mirror of nature or the world. That this reflection can be made to work practically as the rules of science or technology is magically persuasive of the idea that we have found the truth—and truth, as everyone knows, will set us free.

But this, as dozens of present-day critics keep pointing out, is a massive delusion. The rules of the scientific system do not represent the whole; thinking that they do prevents recognition of the wonder and the potentiality of the true whole, whatever it may be. This is the disaster of intellectuality. It leads from one plausible set of delusions to another.

The genius of intellectuality lies in its capacity for self-awareness, in the fact that only through its reflective power do we become consciously aware of anything—including our mistakes. The criticism we make of rationalist neglect of wholes is itself an expression of rationality. Only through abstraction are we able to contrast the idea of a part with the idea of a whole. To say, as Mr. Slater does, that the inability to perceive wholes usually goes by the name "rationalism" is a rational judgment—although an *unusual* rational judgment, since it is much easier to think about definable parts than about practically indefinable wholes. His book, *Earthwalk*, in fact, constitutes some sort of therapeutic leap of the modern mind. It represents a way of thinking that will almost certainly become characteristic of serious inquiry before very long. It is mostly thinking about *thinking*, with some tentative thinking about wholes.

Until almost the present, thinking in the Western world has been limited to thinking about doing. The language of industrialism emerged in the closing years of the eighteenth century. "Industry," a word which once described a desirable trait of character, became the name of an economic institution. The discoveries of Newton had already given sanctity to machine principles, which were not only productive for economic human good but believed to express the very laws The machine would become the of nature. instrument of immeasurable prosperity while serving also as a metaphor for sublime celestial arrangements. In an address to some distinguished citizens of Philadelphia at the time of the Constitutional Convention (1787), Tench Coxe united the prevailing hopes and themes of American life in what amounted to a metaphysical credo of industrialism. Leo Marx relates in The Machine in the Garden (Oxford University Press, 1964):

As he [Coxe] describes the situation in 1784, the momentous achievements of science, the political movement to establish the new American Republic and the forthcoming use of machine power in production all belong to the same encouraging flow of history. They are all signs of a progressive unfolding of the structural principles of the universe—the laws of "mechanism."

The speeches of Tench Coxe in the summer of 1787 prefigure the emergence of the machine as an American cultural symbol, that is, a token of meaning and value recognized by a large part of the population. By 1851, when Walt Whitman tells the Brooklyn Art Union that the United States has become a nation "of whom the steam engine is not a bad symbol," he assumes that his audience knows what he is talking about. Needless to say, a collective image of this kind gathers meanings gradually, over a long period, and it is impossible to fix upon any single moment when it comes into being.... What is most fascinating about the speeches of Tench Coxe is that in them we witness the virtual discovery of the symbolic properties of the machine image—its capacity to embrace a whole spectrum of meanings ranging from a specific class of objects at one end to an abstract metaphor of value at the other.

Less than fifty years later Thoreau saw quite clearly what was happening. A German writer, J. A. Etzler, had published a book with the title— *The Paradise within the Reach of All Men, without Labor,by Powers of Nature and Machinery*—which Thoreau reviewed in 1843. Thoreau began with this quotation from the author:

Fellow-men! I promise to show the means of creating a paradise within ten years, where everything desirable for human life may be had by every man in superabundance, without labor, and without pay; where the whole face of nature shall be changed into the most beautiful forms and man may live in the most magnificent palaces, in all imaginable refinements of luxury, and in the most delightful gardens; where he may accomplish, without labor, in one year, more than hitherto could be done in thousands of years; may level mountains, sink valleys, create lakes, drain lakes and swamps, and intersect the land everywhere with beautiful canals, and roads for transporting heavy loads of many thousand tons, and for travelling one thousand miles in twenty-four hours: may cover the ocean with floating islands movable in any desired direction with immense power and celerity, in perfect security, and with all comforts and luxuries, bearing gardens and palaces, with thousands of families, and provided with rivulets of sweet water; may explore the interior of the globe, and travel from pole to pole in a fortnight; provide himself with the means, unheard of yet, for increasing his knowledge of the world, and so his intelligence; lead a life of continual happiness, of enjoyments yet unknown; free himself from almost all the evils that afflict mankind, except death, and even put death far beyond the common period of human life, and finally render it less afflicting. Mankind may thus live in and enjoy a new world, far superior to the present, and raise themselves far higher in the scale of being.

There is at least a family resemblance between this floridly eloquent advertisement of the promise of technology and present-day appeals for colonizing the moon, although Mr. Etzler relies, more sensibly, perhaps, on the energy potentials of Wind, Tide, Waves, and Sunshine. Thoreau, however, is not in the least persuaded. He sees Etzler's account of Paradise as a case for amending nature's process to suit ourselves. He replies with a satirical extension of the argument:

Let us not succumb to nature. We will marshal the clouds and restrain tempests; we will bottle up pestilent exhalations; we will probe for earthquakes, grub them up, and give vent to the dangerous gas; we will disembowel the volcano, and extract its poison, take its seed out. We will wash water, and warm fire, and cool ice, and underprop the earth. We will teach birds to fly, and fishes to swim, and ruminants to chew the cud. It is time we had looked into these things.

And it becomes the moralist, too, to inquire what man might do to improve and beautify the system; what to make the stars shine more brightly, the sun more cheery and joyous, the moon more placid and content. Could he not heighten the tints of flowers and the melody of birds? Does he perform his duty to the inferior races? What is the part of magnanimity to the whale and the beaver? Should we not fear to exchange places with them for a day, lest by their behavior they should shame us? Might we not treat with magnanimity the shark and the tiger, not descend to meet them on their own level, with spears of sharks' teeth and bucklers of tiger's skin? We slander the hyena; man is the fiercest and cruelest animal.

Thoreau is not opposed to pursuing harmonious relations with nature, but he thinks it a folly to attempt to work all changes from without, by means of mechanical control. He seems to anticipate the application of the principle of synergy to the affairs of man:

Undoubtedly if we were to reform this outward life truly and thoroughly, we should find no duty of the inner omitted. It would be employment of our whole nature; and what we should do thereafter would be as vain a question as to ask the bird what it will do when its nest is built and its brood reared. But a moral reform must take place first, and then the necessity of the other will be superseded, and we shall sail and plough by its force alone. There is a speedier way than the "Mechanical System" can show to fill up marshes, to drown the roar of waves, to tame hyenas, secure agreeable environs, diversify the land, and refresh it with "rivulets of sweet water," and that is by the power of rectitude and true behavior.

Thoreau was shy only with human beings. When it came to disclosing ideas, he was wholly forthright in declaring his faith. He knew that a man would need to bend his back and sweat to earn a living, but he saw no penalty in this. What is Thoreau's plan or principle? He tells us briefly:

Surely a good man need not be at the labor to level a hill for the sake of a prospect, or to raise fruits and flowers, and constructing floating islands, for the sake of a paradise. Where an angel travels it will be paradise all the way, but where Satan travels it will be burning marl and cinders.

Thoreau is utterly convinced that the world of nature—or is it the spiritual behind the natural world?—has its own wisdom, wordless perhaps, but functionally close to perfect when left undisturbed.

What Thoreau said in 1843, Philip Slater seems to be saying today. Thoreau thought about how men think, and found it commonly selfdestructive. But in his time he was hardly heard. Now Mr. Slater says very similar things in contemporary language, practicing a kind of selfexamination and analysis that seems likely to become the foundation of a new kind of rationalism. He says:

To exercise control over the environment limits its freedom to influence us. We act on it in such a way as to make its influence a product, in part, of our own efforts—that is, we help create the stimulus to which we respond. Control means that we put a bit of us in the environment and then treat it as if it were a wholly independent stimulus.

Control thus dulls and deadens our experience. The more we control our environment the less possible it is to experience novelty, however avidly we seek it and seek to coerce it. For novelty and freshness cannot be coerced—cannot be commissioned or scheduled, like a happening. They are dependent for their very existence on our having no control over them. To pursue them is to destroy them.

The attempt to control and master the environment thus automatically pollutes it, for it decreases that aspect of the environment that renews, refreshes, surprises, and delights us. The purpose of control is to generate predictability, but predictability is boring as well as secure, fatiguing as well as comforting. Each act of mastery replaces a bit of the environment with a mirror, and a house of mirrors is satisfying only to very sick people....

People in our society are indoctrinated from birth with the notion that personal choice is an unqualified boon to humankind—that all our ills derive from the persistence of obstacles to its fullest realization. Yet rats, faced with the choice between a healthy diet and saccharine will select the latter and starve to death, and the frantic buying activity that Americans exhibit is perhaps the same phenomenon.

There is, incidentally, no saccharine in the natural environment. How many of the things that actually make us ill are products of the natural environment? Is, then, the natural environment something we should all try to get back to? The question is almost meaningless because returning is quite impossible. The problem is rather the philosophical or psychological one of trying to understand what "natural" may mean in relation to our present condition or needs. Writers like Philip Slater can show us how poorly we manage in an environment spoiled and polluted by human interference, but how to relate naturally to the scene we have distorted, how to make something good out of both it and ourselves-this question is very difficult to answer. Simple societiesprimitive societies-are only analogues of what we need.

Mr. Slater gets this across effectively:

Cooperative assumptions always give way to competitive ones when one powerful body begins to play by its own competitive rules. This is all it takes to destroy trust and give rise to a competitive system. The history of the West is simply the progressive dissemination of this infection: A dominant society brutalizes a simple one, which ultimately overwhelms its oppressor and becomes itself an oppressor. There is no clearer explanation of why the hope of the world lies in the ideas of the Thoreaus, the Tolstoys, the Gandhis. They are the ones who have understood the absolute necessity to reverse the processes introduced by reliance on power and control. The infection of control runs throughout our society, from top to bottom and in all its parts. Mr. Slater says:

The difference between the two modes of thinking is nicely exemplified in the area of health. It has taken more than a century for Western medicine to rediscover what witch doctors and shamans have known all along: (1) that a disease occurs in a whole organism, not, as in a machine, in one defective part; and (2) that every organism is organically related to others, and to the total environment, and hence any "cure" that does not take account of these relationships is likely to be ephemeral. What we stigmatize as magic is scientific inasmuch as it teaches the wholeness and interconnectedness of living forms. Scientific medicine, on the other hand, is irrational in that it treats the organism as if it were a machine, disconnected from its surroundings and internally disconnectable.

It comes down to this: We have at last reached the conclusion, after much pain and many punishments and warnings from nature, that our sharp-shooting, problem-solving, aggressively conquering approach to life and the environment makes continual trouble for us, that it leaves out crucial considerations and will do us in if we don't change our ways. Our minds now tell us that we must learn how to live holistically, cooperatively, and harmoniously, but our knowledge has all been accumulated in terms of separate items of information, isolated processes, and mechanistic relationships. We hardly know anything about "wholes"-what they mean, how far they extend, what their inner structural arrangements are, and the hierarchy of priorities in their healthful We can give many examples of operation. different sorts of wholes, but "explaining" them seems almost impossible.

Where does the wisdom of the organism come from? On what was Lao tse relying when he talked about the wonderful resolutions accomplished by or in the *Tao*? We have words like "instinct" to cover such matters, but this stands for a lot of examples, not a principle of explanation.

Mr. Slater offers a remarkable instance of this hardly conscious wisdom as it operates in traditional human communities. He quotes a letter from a Moroccan graduate student who had attempted to do some "research" in the old Arab city where he lived:

I went to the public telephone [in the post office] which is not an automatic one. I gave my list of numbers to the operator who happens to have known me since ages. He wanted to know why I want to call all these people I explained briefly that I was doing a sort of sociological survey. He wanted more details. I told him that it will take us about an hour, and that by then the post office will have to close. He took it as an insult and asked me to wait until he called me. I did. He called me to say that the numbers were either busy or not answering, and that in any case I should not try to monopolize a public phone by calling so many people. I then told him I was sorry I was so worried about the time, and that I was ready to tell him what I was doing. I did. He wanted to know how can 10 or 20 people, very special and particular, be representative of hundreds and thousands, who only have some things in common with them. So I proceeded to explain "la théorie de la prohabilité." He then disagreed and rejected the theory as being junk. I told him that it was his right to reject it, that that was the normal destiny of a theory-some accept it and some reject it. He did not like my attitude and said that I was avoiding discussing the matter with him, because I think in my head that he is not worth discussing with because he did not have my chance to carry on his studies and ended up doing a stupid job, etc. I tried to convince him of the opposite. It took me two more sessions and three days to get to use the phone.

This is Mr. Slater's comment:

A traditional culture is full of distractions. One cannot deal impersonally with the environment, or follow out an internal program in the mechanical, linear way we are used to doing in the West, One is caught in an intricate web of ties that pull one back and demand an examination of how every new act relates with everything else. Relationships are primary, taking precedence over the pursuit of knowledge or personal achievement. The ecological problems we face today are not possible so long as this kind of thinking persists; the absorption in interrelationships prevents one from even contemplating the kind of mechanical response that leads to ecological imbalances. One is not allowed to postpone (indefinitely) dealing with "social" or "human" consequences of some narcissistic pursuit....

Americans delight in the ease with which they can get things done, but we owe it all to the simple device of having abolished every social mechanism for weighing actions in advance. This is done largely through absolutistic slogans like free enterprise, scientific freedom, freedom of choice, and so on. These slogans have been marketed so successfully that most civilized peoples, confronted daily with the disastrous consequences of the removal of social balancing mechanisms, feel that the price is worth paying.

This may be wildly impressionistic social psychology, but it gives you pause. One breaks out of the network of human obligations woven by the traditional society at his peril. Those obligations now may seem meaningless confinement, but they once ordered the normal metabolism of healthful community life. We know what this means: we speak of "organic social How this unconscious wisdom relationships." became embedded in ancient social communities remains a mystery-perhaps it was still unspoiled nature working through groups of mankind-but even if we are quite ignorant of what a social human whole is or ought to be, the truth that we are all parts of one another is quite evidently the primary law of human life. It seems rational to begin with this.

REVIEW NOTHING SHORT OF MIRACULOUS

AN essay by Robert McClintock, "Rousseau and the Dilemma of Authority," in the Fall (1975) *History of Education Quarterly*, leads naturally to the question: Why is it that writers who lay the greatest claim on our attention are often the writers who are the most misunderstood? What is it that dooms excellence to upside-down readings or interpretation? Surely men of genius ought to be able to guard against this!

The reply is probably that they try to guard against it, but that their warnings are either over our heads or ignored. How often has Plato been called an authoritarian or even an archetypal fascist, despite the fact, as Northrop Frye has remarked, that "Socrates in the *Republic* is not concerned about setting up his ideal state anywhere: what he is concerned about is the analogy between his ideal state and the structure of the wise man's mind, with its reason, will, and desire corresponding to the philosopherking, soldiers, and artisans of the political myth."

Plato, Mr. Frye goes on, pressing home his point, realized "that while the wise man's mind is rigidly disciplined, and while the mature state is ordered, we cannot take the analogy between the disciplined mind and the disciplined state too literally." For Plato, "the wise man's mind is a ruthless dictatorship of reason over appetite, achieved by control of the will." Mr. Frye continues:

When we translate this into its social equivalents of a philosopher-king ruling workers by storm-troopers (not "guardians," as in Jowett, but "guards"), we get the most frightful tyranny. But the real Utopia is an individual goal, of which the disciplined society is an allegory. The reason for the allegory is that the Utopian ideal points beyond the individual to a condition in which, as in Kant's kingdom of ends, society and the individual are no longer in conflict, but have become different aspects of the same human body.

If, as Plato affirms in the Gorgias and elsewhere, so long as we have divided selves, we shall have inner conflict, and if this conflict inevitably reflects itself throughout the society, why didn't he leave utopias alone and write only about the means to personal integration? Then he would have confused no one. But Plato was not interested in merely private salvation. He knew, we could say, that the vision of a united society was needed as an ideal, to call out the nobler human qualities. Moreover, since the focus of human attention is on issues and problems of the social order, the analogy of an ideal community would engage the minds of his readers. Yet he could hardly use it without the danger of being misunderstood by the literalists and simplifiers. That was the chance he took. It must have seemed to him worth taking.

We probably learn more from the use of analogy than in any other way. But analogies illustrate parallels, not identities. If they revealed identities. there would be no learning. Tautologies do not instruct, since we already know what they say. The literalist, then, is psychologically lazy. He wants simple answers, not invitations to learning. He refuses to do the thinking analogies require. The dialogues of Plato, incidentally, are *filled* with wonderful parallels that cannot be taken literally. They represent numerous stages and steps up in the learning process, but never the crucial leap. The leap is secret and ineffable.

A central question asked by educators is: How do you put the necessities of the learning process into a constitution?

The most important counter-question is: Can it be done? The answer may be: Devise a constitution which allows the necessities of the learning process to flow in freely through the openings left by the law. This would mean that you get the learning process into the constitution by filtering it through the constitution. Can there be a formula for doing this? Probably not, although "The least government is the best government" might be a beginning.

In a posthumously published essay, "Education for the People," D. H. Lawrence said some things that help to show why the necessities of the learning process cannot be directly legislated into being:

Here then is the new ideal for society: not that all men are equal but that each man is himself. . . . Particularly this is the ideal for a new system of education. Every man shall be himself, shall have every opportunity to come to his own intrinsic fullness of being. . . . We must have an ideal. So let our ideal be living, spontaneous individuality in every man and woman. Which living, spontaneous individuality, being the hardest thing of all to come at, will need most careful rearing. Educators take a grave responsibility upon themselves. They will be priests of life, deep in the wisdom of life.

There is also this other remarkable utterance by Lawrence, quoted recently in these pages:

One man is neither equal nor unequal to another man. When I stand in the presence of another man, and I am my own pure self, am I aware of the presence of an equal, or of an inferior, or of a superior? I am not. When I stand with another man who is truly himself, and when I am truly myself, then I am only aware of a Presence, and of the strange reality of Otherness. There is me, and there is *another being*. . . There is no comparing or estimating. . . Comparing enters only when one of us departs from his own integral being, and enters the material mechanical world. Then equality and inequality starts at once.

There are some ideas and images here which seem very close to the truth of the matter. Our ideals, which we need and must have, are felt, but are not measurable. They are flows of transcendent being, not finite elements. But in the "material, mechanical world"—the world that cannot do without constitutions—ideals are always chopped up into finite quantities, which is a species of blasphemy, since, chopped up, they are no longer ideals. Forced into the constitution, instead of being allowed to swim delicately past its rules, the ideals often become the instruments of "the most frightful tyranny." Naturally enough, this makes men who do not see what has happened the enemies of "ideals," just as an anthropomorphic god makes men haters of religion, especially when religion is put into constitutions.

Rousseau, as Mr. McClintock shows, gave thought to the form of a constitution which would protect ideals while focusing them. He didn't succeed, didn't believe he could, but he tried very hard, and his great impact on succeeding centuries is doubtless due to some sort of intuitive awareness of the validity of his vision, however much the protective mechanisms fell short of what they were meant to accomplish. Mr. McClintock says:

To understand Rousseau's thought properly it is essential to grasp [the] distinction between amour de soi and amour propre, for it is fundamental to all his writing, first appearing in his early works and being maintained through his later ones. Amour de soi is the desire for self-preservation, the affirmation of life, the quest for fulfillment that moves any living being to survive. Amour de soi is a direct regard for self, one that takes into account only the immediate needs and aspirations of the self as they exist for it and it alone, not as they may exist in comparison to the needs and aspirations of others. Amour propre, in contrast, comes into being as the direct regard for self is transformed into an indirect regard, one that proceeds through comparison. With amour propre the question ceases to be whether something is good for oneself and becomes whether it is as good for oneself as something else is for another. Whereas amour de soi leads one to seek for self-fulfillment, amour propre diverts one into seeking selfaggrandisement relative to others. Amour propre defines the self, not by reference to its intrinsic potentialities, but by its condition relative to others. Amour de soi prompts one to eat enough food to sustain a full and active life; amour propre goads one to consume meals more sumptuous than those of one's neighbors.

The ideal society, Rousseau believed, should give free play to *amour de soi*, while holding *amour propre* to a minimum. Existing societies had an opposite effect:

Almost invariably, as Rousseau saw it, acts of authority were such that in rationalizing deference to them one referred to the self defined by comparison and thus built up one's amour propre, one's pride, ones vanity. For the most part, the demands made upon one by other people were absurd, having practically nothing to do with one's intrinsic potentialities, and one deferred to them only out of a relative, cunning self-regard, out of fear of others' power or out of ulterior motives. As a result, authority as it is, in Rousseau's view, was a tremendous system for inculcating the morally destructive habit of comparing one's condition to that of others, for becoming prideful, vain, and envious. Authority ought not necessarily lead to these destructive effects, for in rationalizing deference to authority as it should be one could only refer to one's amour de soi, one's intrinsic self, one's love of being. and in doing so, one would see the deference as a positive feature in one's over-all affirmation of life.

The idea of the General Will, the fundamental conception of the Social Contract, was meant to secure fulfillment of amour de soi. "Rousseau was adamant: for this sublimination of one's amour de soi through the social contract to be valid, the acts of the sovereign-public power under the direction of the general will-had to apply equally to all." This was the rule behind "Rousseau's unfortunate phrase about forcing men to be free: in refusing to follow a sovereign command of the general will, an individual was claiming special treatment in matters that had properly to apply to all." As for making this actually work in practice, Rousseau was skeptical; not quite as skeptical as Socrates, as shown at the end of the ninth book of the Republic, but skeptical. Mr. McClintock says:

The optimum solution . . . would be, as his political theory postulated, the creation of a public realm that was non-corrupting, that men could participate in through their *amour de soi*. But one could create such a new system of authority only by participating in the old, that was the dilemma. Rousseau spoke bravely about the lawgiver, the semidivine personage who could, like Moses or Lycurgus, engender a legitimate sovereignty from a fallen people. But the lawgiver could not be counted on in the reasonable anticipation of reform. Like the examples to which Rousseau appealed, the law-giver was quasi-mythical: "We find in the work of the lawgiver two things which look contradictory—a task which is beyond human powers and a nonexistent authority for its execution." Social salvation through a lawgiver, Rousseau held, was not impossible, but it would be nothing short of miraculous.

What then were Rousseau's larger intentions? Mr. McClintock suggests: "They seem to me to anticipate in large part the twentieth-century quest of *l'homme engage*, the demystification of the state, the complete personalization of responsibility, the sense that freedom is the element of choice always present in existence."

COMMENTARY DREAMS AND REALITY

THE difficulties of articulate dreamers make the underlying theme in this issue. In the lead article, Tench Coxe's dream of an industrial paradise (in Etzler's version) is contrasted with Thoreau's ideal, which is based upon very different conceptions of value. Both are dreams having to do with man's relationships with nature.

Review presents dreams relating to man's relationships with man—Plato's and Rousseau's.

The "Children" article has for its content the vision of Community which pervaded the life of Arthur Morgan. Since he combined the skills of the technologist with the aspirations of a communitarian, the record of Morgan's life shows how one man achieved both effectiveness and consistency in a very imperfect world. While the vision he had at eighteen was hardly duplicated by the arrange meets he made twenty years later for the workers of the Miami Conservancy District, he did what he could, and all his life he elaborated his dream in terms that could have *some* sort of realization.

This week's Frontiers makes a chapter of criticism of the practical outcome of Tench Coxe's dream in the same imperfect world. Edward Goldsmith's alternative for the future is briefly described.

There is something to be learned about dreams in "Looking for a New World," an article in the *New York Times* for Feb. 29. Donald Pellman, a high school teacher, tells how he and his wife abandoned the urban scene and bought "30 acres in Vermont to get back to the earth and find self-sufficiency." Two years later, brooding over his failures and inadequacies as a farmer, and admitting his undeniable dependence on the existing society, he decided that "the necessity of proving myself, the romantic posturing, and even the cynicism all added up to one thing adolescence!" Helpful in reaching this conclusion was the observation of a thoughtful neighbor: "The trouble with all of us is that we're too preoccupied with ourselves, with figuring out who we are."

Mr. Pellman makes it clear that he and his family are slowly finding what seems the right balance in life, and a better understanding of their ideals. Their experience also shows that dreams of community and the "organic" life, like the technologist's "vision," are based upon abstractions from reality. They may be better abstractions, but they nonetheless leave out a lot of things that need to be understood.

CHILDREN ... and Ourselves "THE LONG ROAD"

THE most unforgettable account we know of an American boy growing up to manhood and a life of deliberately chosen responsibilities is *Finding His World*, a book put together by Lucy Morgan about her husband, Arthur Morgan, who died at ninety-seven on the sixteenth of November of last year. Three areas of American life were widely affected and improved by Arthur Morgan's efforts: flood control engineering, community building, and education. In the November-December issue of *Community Service Newsletter* his secretary, Margot Ensign, recalls some of the things he told her about his boyhood. Concern for the quality of community life began very early:

As a boy of ten or eleven, walking around his home community of St. Cloud, Minn. (pop. 5,000), he observed it left much to be desired—there were, for example, over thirty saloons. Standing on the fringe of any group of people chattering together, he nearly always found they were talking of trivial matters. The local newspaper contained no real news or articles, only trivia and announcements. Young Arthur saw the need for improvement and at once decided to do something about it.

He had already spent considerable time in the St. Cloud Public Library which had a surprisingly fine collection of books, a gift of Edward Everett, governor of Massachusetts. From his readings the young Arthur made extracts which he sent to the local St. Cloud newspaper. At first he had to buy space in it, paid for by the sale of vegetables he grew and peddled. Then the editor, apparently realizing there was no commercial basis to this venture, gave him free space. This continued for several years. As far as I have learned, it was his first effort at improving the quality of community. This is as he told it to me, during the last few months of his life, when he often loved to set sail through the rosy mists of I asked if he remembered any reminiscence. reactions or comments on his efforts. "None," he said.

The recollection of what may have been his first vision of "community," as inspiration or ideal,

is repeated from a taped conversation Dr. Morgan had with Clarence Leuba, former professor of psychology at Antioch, in 1966:

When I was 17 or 18, I remember I'd been thinking about it. I'd been tramping in the woods, and I was just coming home (we lived just at the edge of the town-the street just down from our house went off into a footpath through the hazelbrush) and I began to get a sort of a picture. I was coming along in the hazelbrush and I stopped and stood there. I may have stood there for half an hour, while a picture came to me as to what I could make. I had a picture of a little community or village, and I knew a family in our town, a man and his wife and the husband's brother and two or three children, friendly to each other. That was sort of my picture of what a family might be like. I had a picture of a little village-I can see still two or three of the cottages just as they were in my picture-and people like this family, only some of them would be carpenters, some would be other workers, mechanics, and other people who would know geography, biology, geology, and we'd be making our living, we'd find ways to make our living and we'd get our own food.

I remember as I dreamed there were long rows of hams and smoked chicken and so forth-I can still see that picture. . . . Then we'd be building our houses there and we'd be selling things, so that we'd be independent, we wouldn't be dependent, we wouldn't be begging from anybody. The teachers would have their families there and the pupils would be living in the teachers' houses with them. This is sort of like members of the family. We'd be asking the teachers about all sorts of things-it might be religion, it might be geology, and so forth, and there would be nothing that we wouldn't be talking about. We'd be philosophizing together, we'd be trying to invent new industries, new ways of making money. It would be a community of explorers and inventors and teachers and students, a friendly group. A very childish picture, perhaps, but I remember being so taken up with that picture that I stood there on the footpath in the hazelbrush for possibly an hour. I didn't have a burst like that very often, but I sort of built on this.

The "picture" part of dreams is often like that—drawn from the odds and ends of one's memory—and what makes it significant is the indescribable feeling-tone that pervades the visual scene. This "vision in the day" which came to Morgan was undoubtedly what Maslow identified as a peak experience. It may eventually be recognized that the most important enterprises of our lives grow out of such experiences—not from the imagery, but from what lies behind it.

Morgan always tried to turn engineering projects into vehicles for education and community improvement. A story in the *Dayton Daily News* describes his work in flood control for the Miami Consenancy District in 1915:

Morgan saw the Miami project as a social undertaking as well as an engineering enterprise. He developed the idea of establishing better living conditions for the men who worked on the dams. Bunkhouses with dining rooms were built for single men, and they were designed with an eye toward providing more than makeshift arrangements, as was then the usual practice in construction projects.

Small houses were constructed for families. At four of the dams, free night schools were provided so the men could take technical courses and immigrants could learn English and elementary schools for the workers' children. A program of health and accident insurance was also established for the workers.

At each construction site the work communities were encouraged to develop their own system of local government. Community associations were formed and elections held; generally, the associations appear to have been concerned with social life, camp improvement, education and safety.

Observations by Griscom Morgan throw light on the thinking behind Arthur Morgan's lifelong interest in the small community:

Throughout his life Arthur Morgan sought to combine in a balanced wholeness all essential values of life and culture in such a way that they could be practically applied in people's lives. He saw that the small community was as necessary for this as is the individual and the family, and that families and individuals, without the context of good, intimate community support would decline in qualities that make for good human life.

He did not deny the importance of large scale, but he saw that it was fundamentally a reflection of the people's personal experience in the immediate surrounding world, beginning in early childhood. So much more the need that the local community and the family have a broad perspective and not be narrowly provincial. Given this understanding, Arthur Morgan felt that great achievement for the future must have its roots in pioneering of small groups committed to building together a better way of life, with mutual support in their departure from old established ways. This was the character of the world he sought, a fellowship of free minds, of people committed to common long-range values that would be a base for cooperation and organic unity of endeavor.

But he also saw the need for disciplined persons, since true freedom requires discipline. He saw that, lacking discipline, the individual becomes subservient to either undisciplined biological drives or to unthinking political or religious fervor. And he realized that the desired qualities of society could prevail only through inner strengths and wisdoms; not by manipulation and violence, and that this would require centers where a sufficient number of people of common purpose could reinforce each other in better ways and patterns of life. Such centers he sought to develop under the circumstances available to him, wherever opportunity opened....

Arthur Morgan approached the small community as one of the most neglected and focal units of life....

Morgan wrote many books, the most important of which is almost certainly a small volume of essays, *The Long Road*. This and his many other books are available at reasonable cost from Community Service, Inc., Box 243, Yellow Springs, Ohio 45387.

FRONTIERS A "Philosophic" Warning

IN 1958 Ludwig von Bertalanffy told an audience at the California Institute of Technology:

The traditional ethical code gives rules for individual behavior, but none for those complicated social systems which have arisen in our civilization and where the *dramatis personæ* to a large extent are not human beings, but abstract entities which by way of a legal or political fiction act as if they were individuals. Operating the colossal social structures of our time—from businesses to states to humanity as a whole—with the ethical concepts of a nomadic society of 2,500 years ago is like operating an atomic reactor with the technology of a bushman . . . never before was the individual so entangled, controlled and governed in his most private affairs by impersonal and hence often inhuman social forces.

The immunity of these "colossal social structures" to the counsels of informed individuals—persons *chosen* to provide guidance to government policy—is illustrated by Samuel Florman's comment (*Harper's*, February) on the plan to re-establish a White House advisory group on science and technology. The job of science adviser to the president was created in 1957 "to act as the heroic defender of the people against the special interests." Questioning the value of its renewal, Mr. Florman summarizes briefly the record of the Science Advisory Committee during the sixteen years of its previous existence:

Although the post of adviser was held by a series of eminent and respected men, starting with James R. Killian, Jr., former president of MIT, and ending with Edward E. David, Jr., of Bell Telephone Laboratories, the committee found itself subject to manipulation and misuse. Its recommendations concerning DDT were received but not implemented. Its warnings about underground nuclear weapons testing were suppressed. Its report on defoliation, superficial to begin with, was not released until after the program in Vietnam had already been ended. In the SST and ABM debates, the committee's warnings were hidden behind a barrier of "confidentiality," while its endorsements were used to support the Administration's arguments. When individual committee members made remarks in public which

President Nixon considered disloyal, the entire organization was summarily disbanded.

It becomes obvious that institutions brought into being to exercise power are constitutionally indifferent to recommendations concerned with humanly desirable goals. Conscientious objection is manifestly more effective. While hardly anyone except those directly involved knew that the advice of the president's science advisers was being deliberately ignored, the resignations of three nuclear engineers from their jobs with the San Jose (Calif.) plant of the General Electric Company became first-page news throughout the country. The story in the *Los Angeles Times* for Feb. 3 began:

Three high-level General Electric Co. engineers with a total of 47 years of experience in designing and building nuclear reactors resigned Monday because, they said, the risks of nuclear power are too great.

The resignations represent the first break in the ranks of the nuclear industry by high-ranking employee deeply involved with nuclear technology... . The men said they were concerned with the adequacy of plant designs, with the threat of human error along the complex chain of the nuclear fuel cycle and with the certainty that nuclear regulation is ineffective.

Continuing development of nuclear power, they said, would lead inevitably to a catastrophic accident. "Nuclear power has become a 'technological monster' and it is not clear who, if anyone, is in control," one engineer said in his letter of resignation.

When questioned by a *Christian Science Monitor* reporter, the head of the Federal Nuclear Regulatory Commission (which replaced the Atomic Energy Commission) said of the three GE engineers: "They have been involved in nuclear energy from the end of actually building reactors, experience which I lack." He added: "I would like to hear what they have to say and then think some more about the comparative risks and benefits of nuclear energy." As might be expected, a General Electric official called the letters of resignation "emotional" and lacking in "new ideas." The *Monitor* writer suggested that the objections were "philosophic rather than technical"—a comment apparently related to the view of one engineer that "nuclear reactors and nuclear weapons now present a serious danger to the future of all life on this planet." This "philosophic" apprehension does not reduce its grounding in expert technical knowledge.

What will happen as a result of these dramatic Perhaps nothing, immediately. resignations? "Colossal social structures" require almost seismic feedback to open the way to change. But meanwhile editors throughout the country will be increasingly eager to give space to intelligent critics of nuclear energy projects. Within a few years or even months we may witness a vast swing of public opinion in the direction of new attitudes toward food, energy, social organization, and the meaning of human existence. There are today dozens of publications devoted to expression of these views. The massive political and economic establishments may be very slow to change, but various intermediate cultural institutions have already begun to respond to the new spirit. For example, within the past year the weekly magazine, Science, authoritative organ of the American Association for the Advancement of Science, has given serious attention to such critics and innovators as Theodore Roszak, John Todd of the New Alchemy Institute, Edward Goldsmith, editor of the (British) Ecologist, and Hazel Henderson. of the Princeton Center for Alternative Futures.

Four years ago Edward Goldsmith published *Blueprint for Survival* in the *Ecologist*—a comprehensive brief for a decentralized, ecologically sound society, compiled by scientists, which in book form has sold half a million copies. The *Science* (Jan. 23) article by Nicholas Wade provides this summary:

Goldsmith's solution lies essentially in reversing the principal features of the industrial revolution. He believes that urban populations must slowly be redeployed in small village settlements which are largely self-governing and which exploit small-scale technology in small-scale economic enterprises. Such changes are not only desirable on social grounds (only through small communities can the social bonds necessary to man's psychic well-being be restored); they are also inevitable consequences, he believes, of the approaching collapse of industrial civilization through material shortages and ecological degradation.

Hazel Henderson adds a psycho-social dimension to the "risk" criticism of nuclear energy sources, as reported in a two-page review of her outlook in *Science* (last Nov. 28):

Henderson would fault a nuclear power plant not only for its potential hazards but because it "dictates" its own sabotage, and it "makes technology more and more inaccessible to the average individual so that he becomes more and more dependent." This kind of technology "concentrates power and wealth and knowledge in fewer and fewer hands at the expense of making the rest of us poorer and more stupid and more powerless." One begins to see why Henderson says, "I fear economic totalitarianism much more than I fear political totalitarianism."

As such voices multiply and grow stronger, both the ethical and the practical common sense of what is said may become difficult to resist.