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STAGES OF AWAKENING

BASIC changes in the goals, hopes, and daily activities of human beings come only as a result of basic changes in attitude. Changes in attitude, however, especially those affecting large numbers of the population, are possible only when the common assumptions of the age are shaken and exposed to effective criticism. Thomas Paine's *Common Sense,* as a scholar has recently pointed out, exercised extraordinary influence on the people of the colonies for the reason that his vivid arguments freed them from assumptions that had controlled their thinking, opening up vistas of a productive, self-determined life. Until Paine broke the mold of habit, old loyalties had made the possibilities of independence impossible to contemplate.

A similar process of liberation from old ideas is going on today. This is happening, not by the persuasions of "alien ideologies," or because of the denunciations of home-grown radicals, but from the application of sober-minded intelligence to the various breakdowns and failures in our society. What major assumptions are being questioned?

Americans have various grounds for self-esteem, but when they order their thinking concerning what they most value in American life, they usually stress the happy combination of idealistic and practical undertakings. Our devotion to ideals, we say, is plainly evident in the institutions of American education, while our practical skill is demonstrated in the legendary success of industry, dominating the economic life of the world and giving Americans a standard of living that has become the envy of all other peoples. Yet even at the moment of their greatest triumph, these achievements are now subject to insistent challenge. But since they are deeply entrenched in vast institutions, and justified, not merely by habitual belief, but also by the countless personal securities and credos to which they have led, the change proceeds slowly, by small, "molecular" increments, gradually loosening the hold of popular belief. Only in terms of historical time can we regard the present as a time of sudden transition.

We spoke of the application of sober-minded criticism. Well, we have always had searching critics, but they spoke and argued with little apparent effect in the past. Why should what critics are now saying have any more force? This question was well answered by W.E.H. Lecky in his introduction to *Rationalism in Europe* (1883). Discussing great changes in outlook, he remarked that the success of any opinion depends "much less upon the force of its arguments, or upon the ability of its advocates, than upon the predisposition of society to receive it." The point, then, is that our society is now slowly acquiring the mood for change. Today's insecurities and disorders, which touch the lives of every class, are making critical analysis increasingly persuasive. As Lecky said:

> Definite arguments are the symptoms and pretexts, but seldom the causes of the change. Their chief merit is to accelerate the inevitable crisis. They derive their force and efficacy from their conformity with the mental habits of those to whom they are addressed. Reasoning which in one age would make no impression whatever, in the next age is received with enthusiastic applause.

Consider, for example, the reasoning of Henry Steele Commager, eminent historian, concerning American beliefs about the role and excellence of the public schools. In an article in *Saturday Review* for Jan. 11, he begins by pointing out that we expect the schools to accomplish what, in the Old World and in traditional societies, was achieved by all cultural institutions in concert. But this expectation is impossible to realize. The schools cannot do all

this, and not the schools, but society itself, is at fault. "Our schools, like our children, are the victims of the failure of our society to fulfill its obligations to Paideia, excellence through education in society's highest ideals."

Mr. Commager shows that the society remains deliberately indifferent to the socio-moral objectives which the schools are expected to establish for the young:

> Thus society rejoices when schools teach that all men are created equal and entitled to life, liberty, and happiness, but has no intention of applying that noble principle to the ordinary affairs of business and government or even to education itself. Thus society applauds the principle of racial equality but does not itself provide the young an example of such equality—knowing instinctively that the example is more dangerous than the admonition. Thus society rewards pupils who can recite the Bill of Rights but has no serious interest in the application of those rights to the tiresome minority groups who clamor for them. Thus society approves when schools celebrate—as they must in teaching the virtues of a Washington, a Jefferson, a Franklin—service to the commonwealth but rewards private, not public, enterprise. It requires schools to teach the primary value of things of the mind but itself prefers the rewards of more material things. It expects schools to teach that justice is the purpose and end of government but itself practices injustice in almost every area of public life—not least in education. It expects schools to teach respect for the law but elects to high office a President and a Vice-President who display only contempt for the law. It encourages schools to teach the virtues of peace—indeed to make clear that the United States has always been a "peace-loving" nation—but exalts war, wages war, and maintains the largest military enterprise.

Quite plainly, the schools as the vehicle for the propagation of ideals—as the instrument of beneficent social change—are a decisive failure. As Mr. Commager says: "After 40 years of exposure to world culture, world politics, world geography, we have turned out to be culturally more alienated, politically more isolated, economically more reckless, and, on the world scene, more chauvinistic and militaristic than at any previous time in our history." With obvious pertinence, he asks:

> Can the schools save the environment when the most powerful business interests in the country are prepared to sacrifice it for immediate profit? Can education—even research—reverse the tide of pollution when even the government is afraid to take firm action in this crucial arena—afraid to put an end to strip-mining, afraid to arrest the insensate pollution of Lake Superior with poisonous chemicals, afraid to impose sensible limits and regulations on the automobile industry, afraid even to endorse plans for sensible use of land? . . .
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> If our educational enterprise is in disarray, it is in part because we have asked our schools to perform a miracle—to teach the young to understand the world they live in, and the one they are to live in in the future, when we ourselves show little awareness of our fiduciary obligations to that future; to train them for the skills required to work an economy that will inevitably be public when we ourselves give priority to the private economy; to persuade them to respect all the values that we do not ourselves observe. Much of education today is a massive demonstration in hypocrisy, and it is folly to suppose that the young do not know this.

In the *New Yorker* for Jan. 6, Richard Goodwin, author of *The American Condition,* assembles reasons for proposing that the economy of the United States has so far departed from the pattern it once followed that there is little possibility for any of the approved remedies for the present difficulties of both inflation and unemployment to work. The laws of the market, on which we depend, no longer operate for the reason that industry has reached a size and power where it no longer is compelled to respond to the market. And it is now apparent, he says, that "we cannot have both full employment and the present concentrations of economic power, just as we cannot have a petrochemical industry without increasing the incidence of cancer."

Traditional economic policies are no longer effective:

> We have relied—at least until recently—upon a regulated market whose animating spirit is the principle of competition. According to the theory of

competitive free enterprise, private conflict—the struggle to make money—will impel the most efficient and productive use of resources. It will reward those who best satisfy the needs and wishes of the country and its population, and in this fashion the forces of the market will compel fragmented private power to serve the general good. Unfortunately, experience has demonstrated that if private power is left alone, it does its best to destroy or evade those market forces—and especially the competitive struggle—which constrain it to serve the *public* interest in the course of pursuing *private* interests.

Once the spur and limitation of competition are eliminated, the old idea of the "survival of the fittest" does not apply. There is no longer, as Mr. Goodwin says, any way of measuring the "fittest"—they are "*all* out of shape." Examples are easy to supply:

There is no standard by which to compare actual performance and possible performance. The man who conceived a new method of automotive transportation, let us say, or devised a way to build cars at half the cost in labor and materials, would not be able to establish himself in competition with General Motors. It would cost too much. And he would not find it much easier to persuade General Motors to make drastic changes in its own operation, for in all likelihood such changes would simply reaffirm its power over a market already controlled.

In short, says Mr. Goodwin, our thinking about economics is ready for a Copernican Revolution. "In other words, the organization of our current economic life prevents us from using our wealth to 'promote the general welfare'." He concludes:

It will be necessary to reorganize economic life itself—to remodel institutions and relationships that have become fundamentally defective and are now incapable of advancing the interests of America and its people. Unfortunately, this effort to reach a new understanding of the modern economy has not yet progressed far enough to offer us a clear design for a revised economic structure.

Four years ago, also writing for the *New Yorker* (June 19, 1971), Charles A. Reich pointed out that conscientious performance of duty in a society which narrows and limits individual responsibility can lead to immeasurable evils. A professor of law at Yale, Mr. Reich is convinced that "our long-accepted criminal-law concepts do not fit the crimes of today." He says:

The central reality is that evil today is the product of our system of organization and our technology, and that it occurs because personal responsibility and personal awareness have been obliterated by a system deliberately designed to do just that—eliminate or minimize the human element and insure the supremacy of the system. . . . In the main, it is this rational organization of human effort that has brought us to our present stage of civilization, but we should realize that inherent in the very design of the system is the disappearance of individual blame, and hence the obsolescence of our concepts of criminal responsibility. . . . A scientist who is doing his specialized duty to further research and knowledge develops the substance known as napalm. Another specialist makes policy in the field of our nation's foreign affairs. A third is concerned with maintaining the strength of our armed forces with the most modern weaponry. A fifth drops napalm from an airplane where he is told to do so. The ultimate evil is the result of carefully segmented acts; the structure itself guarantees evasion by everyone of full responsibility for the full moral act. Indeed, the system, especially when it is combined with advanced technology makes it unlikely that those who participate in the process will have any real awareness of the ultimate consequences. . . . The basic result of our system of doing things is to destroy awareness, alienate all of us from the consequences of our actions. . . .

Mr. Reich is concerned with the question of individual responsibility. In still another *New Yorker* feature (Dec. 2 and 9, 1974), Richard Barnet and Ronald Muller consider corporate responsibility in a book-length, two-part study of international corporations. One can hardly imagine the size and power of such business enterprises:

Within the last ten years, global corporations have grown so fast that their combined total sales exceed the gross national product of every country except the United States and the Soviet Union. With more than two hundred billion dollars in physical assets under their control, the international corporations' average growth rate since 1950 has been two to three times greater than the growth rate of the most advanced industrial countries, including the

> United States. In 1971, General Motors, one of the giants of them all, had gross annual sales of twenty-eight billion dollars; Switzerland's gross national product was twenty-six billion. By making ordinary business decisions, the managers of firms like G.M., I.B.M., General Electric, and Exxon now have more power than most sovereign governments to determine where people will live; what work they will do, if any; what they will eat, drink, and wear; what sorts of knowledge schools and universities will encourage; and what kind of society their children will inherit.

The writers make it plain that the international corporations have little interest in "competition" except to eliminate it as a needless interference with good business. With their capacity to set up factories anywhere in the world, depending upon political stability and the availability of cheap labor, such companies virtually control the conditions under which they produce, and are able to change suppliers at will, since they often own them. All that Mr. Goodwin suggests, in his conclusion that modern economics is no longer ruled by the market, is documented by this study of the international corporations:

> Companies such as the Big Three auto-makers, the big television manufacturers, and the big computer makers compete with one another, contrary to standard economic theory, not by seeking to undercut one another in price but by means of what economists call oligopolistic competition. In any industry, a few companies compete for ever-larger shares of the market according to well-established but unstated rules. The principal rule is that price competition, except on very limited occasions, is an anti-social practice, and one to be strictly avoided, since it threatens to destroy the whole club.

The competition is in packaging detail, clever advertising appeal, and other forms of gimmickry.

All that E.F. Schumacher has said about the general effects on the under-developed countries of the introduction of high technology in these areas is verified by Barnet and Muller in horrifying detail. All that he says about the importance of education and infrastructure as the basis of economic growth is also confirmed. Meanwhile, the global corporations, which have no enduring interest in the normal development of the poor countries, often have sufficient power to dominate decisions in key sectors of their economies.

It seems evident that the men who run these companies are themselves convinced that the world ought to conform to their corporate necessities, since the global corporations represent the climactic development of the business undertakings in which enterprising Americans have believed for generations. They *must* be doing things in the right way, since they are so successful. Only ignorance and backwardness can explain the opposition they encounter. Barnet and Muller thoroughly expose the delusive foundation of this righteousness. The impact of these corporations on the poor countries is felt in terms of reduced living standards, falling employment rates, and economic injustice. The needs and interests of these countries are not the same as the interests and objectives of the corporations. "The primary interest of the corporation is profit maximization, and this means it is often advantageous for the balance sheet if income is diverted from poor countries."

Some specific charges:

> The global corporations have compounded the world hunger problem in three ways. First, they have contributed to the concentration of income and the elimination of jobs. Second, through its increasing control of arable land in poor countries, agribusiness is complicating the problem of food distribution. It is good business to grow high-profit crops for export rather than to raise corn, wheat, and rice to support an indigent local population. In Colombia, a hectare devoted to carnations brings a million pesos a year, while wheat or corn brings only twelve thousand five hundred pesos. As a result, Colombia, like most other poor countries in Latin America, must use scarce foreign exchange to import basic foodstuffs. . . . Finally, the companies' control of ideology through advertising has helped to change dietary habits in unfortunate ways. By 1966, the major food companies had begun research on low-cost protein foods—baby cereals, soft drinks, imitation milk, candies, snacks, soups, and noodles—and by 1968 a dozen such products were on the market. . . . It is not uncommon in Mexico doctors who work in the rural villages report, for a family to sell the few eggs and

> chickens it raises to buy Coke for the father although the children waste away for lack of proteins.
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> The companies say that they are not to blame if primitive people want to indulge their taste at the expense of their children and their own health.

Interestingly, while the poor countries are growing poorer as a result of such activities, the advanced industrial nations are turning into helpless giants through their total dependence on petroleum, scarce minerals, and imported supplies of food. The international companies, meanwhile, are often beyond control of the countries in which they operate, both abroad and at home—either because of their enormous economic power or through accounting manipulations which tax administrators are unable to trace with much success. The concentration of wealth, in the United States, in consequence of the growth of these companies, has reached the point where "the richest one per cent of all adults owned ninety-two per cent of all trust holdings."

It should be noted that the efficiencies and mastery of industrial technique—leading to this increased concentration of wealth in a few hands—became possible through access to fossil fuels, which are non-renewable resources borrowed from the entire planet's future. Their very skills, therefore, work toward the continued impoverishment of the majority of the world's population. The plans of the corporations offer these people little or no hope. There is no place for them in corporate schemes for further development. Both the people and their modes of self-support are rendered obsolete by the methods which now produce and distribute an ever growing share of the world's goods.

Finally, Barnet and Muller say of the global corporations: "By marketing the fiction that mass indoctrination, avarice, and waste can be the basis of community, they have helped to destroy the possibilities of real community—the reaching out of one human being to another, working out common purposes, not those of higher authority."

The notable reality of the present is the growing awareness of these developments—which are the logical outcome of past beliefs and ideas about "progress." "The heart of the problem," say Barnet and Muller, "is excessive power, and a self-imposed limitation on power is not characteristic of human institutions." It is now evident what the hunger for power leads to:

> Driven by the ideology of infinite growth, the corporations act as if they must expand or die and in multiplying they have made thrift into a liability and waste into a virtue. Their growth depends upon converting ever-greater portions of the earth into throwaway societies—ever-greater quantities of unusable waste produced with each ton of increasingly scarce mineral resources, ever-greater consumption of non-disposable and nonreturnable packaging, and ever more heat in our water and our air. In short, ever more ecological unbalance.

There are, of course, counter-forces at work. But the most powerful lever for precipitating change is the ever-growing evidence of the unworkability of this system of exploitation and control, and the increasingly explicit recognition of moral and practical failure—recognition by decent and articulate human beings who are spreading their understanding around.

REVIEW

DOWN TO EARTH, UP TO THE STARS

A LITTLE more than ten years ago, a lead article in MANAS by Ralph Pomeroy, "The Poem as an Act of Rescue," presented musings on the meaning of a poem by Robert Frost, of a passage from "Patterson" by William Carlos Williams, and of one of the writer's own poems. The purpose of the poet, Mr. Pomeroy said at the end, is to "give us a memorable sense of what really matters." For this purpose, the poet must know when to reach up to the stars and how to come back to earth. There are countless ways to do both.

This is the theme of another of Harold Goddard's essays in *Alphabet of the Imagination.* Goddard admits that poets and philosophers have divided functions, yet is convinced that unless they are poets, too, philosophers turn sterile. Back in 1909 when he wrote this essay, Goddard had been reading A *Pluralistic Universe* by William James. James, he reflects, was not the first to celebrate the wonders of diversity, the riches of difference. A great poet put the burden of James's treatise in two lines—

> There are more things in heaven and earth, Horatio,
> Than are dreamt of in your philosophy.

Then Goddard says:

> When, then, . . . I behold philosophy again before the bar and hear words of indictment [in James's book] which are the very echo of Hamlet's to Horatio, I can not but wonder whether the spirit of poetry, unseen and unsuspected, may not again be near, whether, when the clouds that now obscure the sky have lifted, we may not behold the stars of philosophy and poetry in unwonted but auspicious conjunction.
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> Surely such a conjunction should be in the course of nature, for, often as it is forgotten, the goal of poet and philosopher is the same. Each seeks, in his own way, to unveil the secret of the world. "What is the nature of reality?" asks the philosopher. "What is this thing called life, to which man is bound by such strange chains of destiny?" is the often unconscious question of the poet.

The philosopher makes his containing abstractions, inviting the universe to lie down within his logical forms. Like a map-maker, he sees from afar.

> Not so the poet. He, too, may rise above the world to expand his soul with a sight of life's remoter reaches, a glimpse of its mighty outlines. But he rises only that he may again descend. By an imperative demand of his nature he must know how the hearts are beating in those cities, how the birds are singing in the woods, how the storms are tossing the sailors on the sea.

The poet, apparently, in this argument, is a man who refuses to take off totals, to compose final definitions. The philosopher, on the other hand, is a system-builder who too easily turns into a prison-maker.

It is the words, here, and not the ideas behind them which may perhaps make us uncomfortable. The lover of truth is hardly one who will close out fresh possibilities because of his precious abstractions. This would not be philosophy, but failure in philosophy, if we use the Pythagorean definition that philosophy is love of truth. And Goddard makes it plain that he has something rather special in mind when he speaks of the poet:

> I hope it is superfluous to note that I use the word *poet* in its widest, derivative sense, with no special reference to the artisan in verse. "Poetry," Matthew Arnold has well said, "is simply the most beautiful, impressive, and widely effective mode of saying things."

Writers make words do service according to varied purposes. Jean Giono, for example, thinking about the Provence peasant who restored the forests of the Durance Valley, making happiness and comfort accessible to more than 10,000 people, said: "Peasant civilization possesses as a gift human qualities which philosophical civilizations spend centuries first defining, then desiring, and finally losing." Are peasants poets, then? This goes too far, although some peasants have poetry in them, just as other men do. Goddard's poets do with ideas what Giono's peasant did with seeds:

> The poet, in other words, must know not merely the form and configuration of reality; he must know, too, its fiber and tissue. The stuff out of which the vast tapestry of life is woven, the color and quality of every thread—these are not less to him than the

pattern after which it is fashioned or the design with which it is adorned. The flesh and blood of life, not less than the skeleton.

> . . . it is the function of the poet to quicken the senses of those who, having eyes and ears, neither see nor hear. When he succeeds, we feel that his words have imprisoned once for all the very essence of the object he is depicting, the emotion he is presenting.

But the philosopher classifies. He orders our thought, distinguishing between mind and matter. Quite at home in such controversy, Goddard replies:

> Precisely;—and sometimes with such discrimination that the matter might be substituted for the mind, or the mind for the matter, and none would be the wiser. . . . It is not the poet, your true worshipper of words, who is oftenest the dupe of words. The righteous nemesis of mistaking names for things is reserved, rather, for that man who, caring little for things verbal, indulges in the easy excess of abstract and technical language.

How deftly Goddard impales the tough-minded abstractionist who thinks a word will release him from widely diverse obligations!

> . . . the man who utters the affecting creed, "I believe in the concrete," is by no means, as he may suppose, extending the conquests of metaphysics some leagues farther into the realm of chaos and old night; he is performing, on the other hand, the much commoner and more benevolent act of adding to the gayety of nations. The old irony of things has got him! He stands convicted out of his own mouth—for of all the thin, pale ghosts of abstraction ever paraded the philosophical platform, "the concrete" is assuredly the thinnest and palest. Then let him who has placed his faith in any such bloodless hallucination fear lest, in an hour of disillusionment, he encounter a more dreadful spectre, whose presence shall wrest from him the confession:
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> There are more things in heaven and earth
> Than are dreamt of in *my* philosophy.

William James was still alive when this essay of Goddard's was published. He read it with delight and wrote to Goddard that he had confirmed his (James's) enemies who asserted that the psychologist was a mere *litterateur!* But then James added:

> No matter! I rise and bless your name, for you have caught on to the meaning of philosophy as a *voice.* What the voice has ended by saying to *me* more and more is that the "real" world is the world of Plutarch and Shakespere, in which men live out their several *businesses,* and that the duty of *real* philosophy is to scuff away the preposterous branding by intellectualist philosophy of that world as unreal. You have extraordinary felicities of statement!—Prof. Franklin, of Lehigh U., asked a student what the "heat of combustion" of coal meant. The youth replied correctly: "the number of thermal units generated by one pound," but on being asked how one gets heat out of coal, replied that he hadn't the least idea. "He thought," says Franklin, "that 'thermodynamics' must refer to 'remote and elegant things'." That is what one tradition thinks of "philosophy"! and I am glad to count you as an ally in breaking that tradition down. Many, many thanks for your splendid article!
>
> Truly yours,
> WM. JAMES

What then does the poet contribute? Intensity, answers Goddard. At some point, not over the whole range, the poet pierces through the forms and shells of things and touches the heart of life.

Dr. Goddard's discussion of the relation of poetry to philosophy recalls a similar essay by Wallace Stevens, included by Herbert Kohl in *The Age of Complexity.* Stevens begins by pointing out the poetic genius of Giordano Bruno, and its fertility for subsequent philosophy, and later quotes from Jean Paulhan the following on the present barrenness of the philosophy of science:

> It is admitted, since Planck, that determinism—the relation of cause to effect—exists, or so it seems, on the human scale, only by means of an aggregate of statistical compensations and as the physicists say, by virtue of macroscopic approximations. (There is much to dream about in these macroscopic approximations.) As to the true nature of corpuscular or quantic phenomena, well, try to imagine them. No one has yet succeeded. But the poets—it is possible. . . .
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> It comes to this that philosophers (particularly the philosophers of science) make, not discoveries but hypotheses that may be called poetic. Thus Louis de Broglie admits that progress in physics is, at the moment, in suspense because we do not have the words or images that are essential to us. But to create illuminations, images, words, that is the very reason for being of poets.

COMMENTARY
THE SOURCE OF "SOLVENCY"

THAT the Hubbards (see "Children") have the real solution for today's economic problems seems confirmed in a number of ways. They have it, that is, in principle. They don't think in terms of economics, they don't talk about money, but live their lives in fulfillment of other concerns, and the economics takes care of itself—more or less. There will have to be enough people who think and act in this way before the sound counsels of humanistic economists such as E.F. Schumacher can be applied on a large scale. Anyway, Schumacher's ideas are inherently small-scale, so that large-scale application of them would simply mean a lot of people sharing in his sort of thinking—which is called "economic," these days, because that's where we think our trouble lies, or we hurt the most. Schumacher is only incidentally an economist. Basically, he is a freewheeling neo-Buddhist trying to spread common sense.

An editorial in the April *Progressive* illustrates the futility of expecting solutions from present-day government—anybody's choice of present-day government. The editorial says:

> Congress has ignored a useful analysis of the short- and long-run implications of the energy crisis provided by the Senate Foreign Relations Subcommittee on Multinational Corporations in a 171-page report, *Multinational Oil Corporations and U. S. Foreign Policy.* Based on a two-year investigation and six volumes of testimony, the report documents the role multinational oil corporations have played in establishing and increasing American dependence on Middle East oil. It shows how the companies were initially used as instruments of U.S. foreign policy in the Middle East, how their interests gradually came to dominate domestic energy policies, and how in exchange for saving the Arabs from communism, they were permitted to make production, pricing, and marketing decisions for which every American has paid an exhorbitant price. As late as 1971, the companies were granted immunity from antitrust prosecution so they could jointly negotiate price increases with OPEC. . . . The report effectively demolishes the conventional foolishness that the American national interest coincides with that of the oil companies. . . . The oil companies, which already control 30 to 60 per cent of the nation's coal, more than 50 per cent of the uranium supply for nuclear power, and a significant segment of the fledgling geothermal power industry, are rapidly becoming energy monopolies.

Government is characteristically backward in recognizing the need for change. In America it still looks toward the "technological fix" of nuclear power, while informed opinion the world over is increasingly against it, both because of the hazard to human health and because the incredible cost of its enormous installations may in the end leave very little "net energy." In another article in the April *Progressive,* McKinley Olson points out that private industry is now pulling back from development of nuclear power plants. "The nuclear utilities," he says, "with money on the line, are not so enthusiastic about the future of nuclear power as is the President—which is why utilities have been canceling or postponing 60 per cent of their current atomic energy plans."

Another slant is provided by Elliot Janeway on the multinational corporations discussed by Barnet and Muller in their *New Yorker* article. Their work, now a book—*Global Reach: The Power of the Multinational Corporations* (Simon & Schuster)—is reviewed by Mr. Janeway in *Saturday Review* for Feb. 8. He suggests that despite their claimed prosperity and the astronomical figures of their operations, these companies are running out of money. While agreeing that they are "uniformly more profitable in their foreign operations than in their domestic operations," he says that their weakness at home is critical, and that the banks which have lent them money "have their full share of headaches."

All of which points to the futility of expecting any progress or "solutions" from the various "giants" of our time, whether of government or in the private sector. The outlook of these institutions is fundamentally blind to the human realities which need saving and restoration. It is not cavalier, but simply good sense, to say with the Hubbards: "We avoid discussion of such matters. Just as healthy people are not concerned about sickness and remedies, those who are truly solvent give little thought to money."

CHILDREN
. . . and Ourselves
HOW TO WRITE A BOOK

JUST as there is a right way to live a life, there is a right way to write a book. An essential element is the reason for writing it. In *Payne Hollow,* Harlan Hubbard, who sailed the Mississippi and Ohio rivers until he found a place he wanted to settle on the shore of the Ohio, tells how his book came to be written:

> Our days in Payne Hollow continued to be so full and productive, so satisfying, that I desired to write more about our life here. That is how the idea of writing a book came about. It aroused my interest at once. In addition to telling how we settled in Payne Hollow, I could answer the questions we are often asked—how did you find Payne Hollow in the first place, what happened to your shanty boat, why did you choose to live in this forsaken hollow on the fringe of society? I could describe our life through the seasons and tell how we sustain ourselves directly by our own labor, hand to mouth.

The book is a leisurely, spontaneous thing with a form responsive to the writer's changing inclinations. The reader knows without being told that it grew out of a natural life—not a life of fierce determination or angry rejection of what other people are doing, but just a natural life which keeps things in proportion and gives play to body and mind. The meditative passages come along in the midst of good description, just as they do in Thoreau. It is not a book that ought to be "reviewed," but to be read and savored, the way you eat a piece of home-made bread.

The mood of *Payne Hollow* is well revealed in a part which tells about the outboard motor Hubbard attached to his rowboat to reduce the toil of rowing a mile across the river to pick up visitors, and then a mile back home. The motor had advantages, but after a while they stopped using it.

> Our objections to an outboard motor are more subtle, and not generally understood by the practical-minded. It makes a different craft out of the johnboat, a driven thing, quivering as if in pain. A motor is odorous and noisy. Even a small one spoils to some extent communion with the river. It interferes with your contemplation of the sky and water and the distant view. Its noise discourages conversation, but this in some cases may be a desirable feature.
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> A motor gives its operator a sense of power which is false for anyone can run the thing. It sets you over to the far shore so quickly and easily that you have not the oarsman's pride of accomplishment; and rowing is an art that can be studied and practiced until a high degree of efficiency, coordination and rhythm is developed. Good rowing is beautiful to watch.
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> By its undeniable need for gasoline, a motor is another strand tying you to the city; but the greatest price I pay is agony of spirit at its erratic behavior, its failure to start or run properly. After a spell of ineffective pulling on the starting cord I feel degraded by what seems a senile relation to it.
>
> At the present time I have gone back to rowing, and thus regained my independence.

A lot comes across gently in this book, without moralizing or strain. Could there be a better start in life for children than living in this atmosphere, learning not so much to talk in this way, but to care about things in this way? Theoretically, a home environment of this sort could be anywhere, depending upon the people, but a place alongside a river might make it easier to maintain.

Payne Hollow is not especially isolated from "civilization." The Hubbards can see, off on a distant bluff, the lights of a college. Now and then the students wander in and visit, coming on bicycle, on foot, or in a borrowed canoe. "They bring with them," Hubbard says, "the zest and friendliness of youth and its wild visions." But attitudes change. The Hubbards have been living in Payne Hollow for nearly thirty years:

> In these latter days a new note is to be heard among the students who visit us. Many of them are scornful of the existing order and determined to pull out of it. Having heard that a couple are living in Payne Hollow on their own experimenting with a self-sufficient and independent life such as they desire

themselves, they come to see how we are making out. Some are enthusiastic and interested enough to ask many questions. Others, the more radical in their views, seem disappointed, even hostile. We wonder about this attitude. It is not caused by lack of sympathy on our part. Perhaps our unspectacular way seems too much of a compromise to these zealots, who would fashion a rough life with more of the bark left on. Contentment, tolerance, order, some degree of comfort and neatness—such notions belong to the establishment.

Other people come and ask their questions. Harlan Hubbard paints, and they ask to see his work. They ask his wife, Anna, about the house, and enjoy seeing the wood stove and what is in the cupboards. They hint that they would like to know about the Hubbards' "financial arrangements."

> Since I do not work at a paying job, and seem never to have done so, it is assumed that we have a private income or public support. This is not so. The small amount of money we need dribbles in from here and there. We are used to "littling along." . . . The house back in town is still rented, a few paintings are sold, something has been set aside for a rainy day. The secret is, spend little and you will have plenty. How much does one need to live on? As much as one has, I say. The first requirement is faith—plus imagination, freedom from prejudice, habit and public opinion, simple tastes and inexpensive pleasures. We avoid discussion of such matters. Just as healthy people are not concerned about sickness and remedies, those who are truly solvent give little thought to money.

The Hubbards have the only real solution for "inflation," of course. Economists may not agree, but people who are alive in all their parts are likely to. It seems a shame, or a presumption, to talk about "education" when hardly anything that can be learned in school matters much in comparison to this simple wisdom.

> When asked this one, we have a ready answer: "What did you do before you came to live here?" "We lived for seven years on our shantyboat." If our interrogator recovers and persists, "What before that?" I am at a loss, not having done much of anything. A life given to painting is not a subject for ordinary conversation.

Well, if the Hubbards make such a good example, shouldn't we try to put them in a museum, or something like that? The trouble is, when virtues are put on display, they stop being virtues. Lao tse understood this. "Not until the country fell into chaos and misrule did we hear of loyal ministers." "Banish human kindness, discard morality, and the people will become dutiful and compassionate." A good book, then, is an art of compromise—an *art* of compromise, and not a real compromise at all.

Why do people ask the Hubbards so many questions?

> I like to think that a deeper and unrealized motive brings these strangers to Payne Hollow. It is not only the young radicals who distrust the world of today. Many people apparently conservative and orthodox harbor an underlying reaction against the artificiality and complexity of urban life (such as even country people live nowadays). A subconscious longing seldom put into words comes out in such expressions as, "These days everyone is in too much of a hurry. Wish we could get out of the rat race and have a place like yours." They do not really wish anything of the kind. The world of today is too beguiling, too comfortable, too exciting. It offers protection and acceptance. Yet the inward doubt and desire, though too feeble to be effective, are hidden in the minds of many, and perhaps they come here to see if there could really be an escape into a way that is less complex and more natural than the one to which they hopelessly resign themselves.

To the young who question him longingly, Harlan Hubbard advises "handiness and experience with tools." He learned most of the practical arts like carpentry and plumbing when he was a boy. He knows how to do brick and stone masonry, concrete work, and how to use a scythe, an axe, and a hoe. It all came in handy, probably making the difference between survival and disaster. His lovely, small book, beautifully designed, was published last year by Eakins Press at $5.95.

FRONTIERS

Low Energy Economics

THE old kind of economic thinking is doomed and rapidly on the way out. Much of the pioneering for this reform, over the past ten years or so, was done by E.F. Schumacher, whose *Small Is Beautiful* illustrates the restoration to economics of both ethics and common sense. There are today dozens of writers helping to establish sound economic thinking on the foundation of ecological first principles. The spread of this thinking, now accelerating, should eventually bring revolutionary changes in the basic ideas of modern society, if only for the reason that this society has in the past justified its values and its goals on the grounds of economic theory.

One writer whose influence might become far-reaching is Mrs Heierli, a Swiss whose recent paper proposing Third World Development based on the low use of energy has been published by CIDOC in Cuernavaca. In his preface Mr. Heierli shows the pertinence of his plan by quoting a German writer who has pointed out:

> If possession of an automobile was as common everywhere as it is in present-day France, for example (half as many per capita as in the USA), it would mean 4 million automobiles for Congo Kinshasa, 130 million for India, and 200 million for China. If you reckon up all the refrigerators, washing-machines, TV sets, schools, universities, hospitals, and private swimming pools as well, and if you think what these things mean in terms of steel, oil and other forms of energy, there are good grounds for believing that, even before our food runs out, we shall have no more metals, no more energy, no more clean streams, and no more unpolluted air.

It is quite ridiculous, therefore, to talk about the development of the Third World countries in terms of the example set by such nations as France and the United States, which are themselves going to have to change their ways. Heierli proposes that economists ought to abandon money as the basis of economic analysis, using the oil crisis to demonstrate his point:

> Increased oil prices in particular will put a heavy balance of payments burden on non-oil-producing countries and will brand many an optimistic development target as illusory. Alternative development strategies are an absolute "must." Since the economic growth of the technologically advanced, industrialized countries is closely bound up with energy consumption, it may be that such alternatives will emerge if we approach the problem from the standpoint of energy. Recently more and more economists have been adopting the energy-based approach because it often provides a better account of the fundamentals of economic development than the traditional money-based approach, in which real cost structure is distorted as a result of today's relatively low energy prices—failing, as they do, to make due allowance for the diminishing character of energy reserves.

The sun human labor is involved in getting enough of that energy for self-support and the production of goods. Plants are is the source of energy, and practically all an obvious energy source, since they accumulate and store energy by the process of photosynthesis. Beasts of burden—the horse and the ox—are other sources. Societies which depend mainly on these living sources are called by Heierli "organic societies." Their growth is slow and limited. But with the mining of coal and the development of machinery—and later of electricity and petroleum resources—economic growth is vastly accelerated. Yet there are corresponding costs in energy all along the way. There is immediate loss of efficiency, for example, when the energy of plants is converted into meat as food:

100 lb. of Wheat Consumed in the form of	*Yield (Calories)*
bread	120,000
chicken	9,625
eggs	30,000
pork	38,700
milk	25,230
beef	11,500

Mr. Heierli comments:

> So if an organic society (and basically this is true of any society) consumes—in addition to wheat—50 per cent of its calorie requirement in the

> form of beef, it is going to need six times the acreage per-inhabitant. Expressed in another way, a society can under optimal conditions feed about 3 inhabitants per acre on an exclusively vegetarian diet but needs more than 3 acres to feed 1 inhabitant on a diet of nothing but meat, quite apart from the acreage required for clothing (e.g. flax), etc.

There are two sorts of energy sources—renewable and non-renewable. Hydroelectric power, for example, is renewable, while coal and oil are not. So renewable energy may be thought of as "income" energy, while non-renewable energy is "capital"—when it's gone, it's gone, used up. Today, by plundering capital energy, Americans use daily 82 times a man's biological requirement and 400 times the amount of mechanical energy that man can produce in a day. How has this been possible? Only through the comparatively low cost of the capital-type (nonrenewable) energy. The American food supply is now largely produced on enormous farms which are utterly dependent on annual consumption of vast quantities of petroleum—80 gallons of oil per acre.

The crucial importance of thinking in terms of energy instead of money becomes obvious. No one can eat money And the money approach hides reality:

> In his famous pin-factory example Adam Smith attributed the advantages of division of labor purely to an increase in human productivity as a result of organization. In fact the permanent substitution of energy for human labor was probably a much more fundamental cause of increased output. This substitution was helped along in the industrialized countries by the fact that accelerating exploitation of fossil-fuel deposits meant that the price of energy dropped faster and faster in relation to wages (the price for human mechanical energy). Today the ratio is something like 1:1,000 in favor of non-human energy.

That ratio is going to change. There will be more use of human energy and of technology which consumes less or no non-renewable energy. This amounts to saying that a vast equalizing process is slowly but surely overtaking the world. There will hardly be a choice in this. The economic laws of the future will dictate low energy consumption and decentralization.

Readers may wish to study carefully this 50-page paper: Write to CIDOC, Apdo 479, Cuernavaca, Mexico, requesting Document I/V, 74/76.