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REFORM IN SCIENTIFIC THINKING

PROGRESS in the philosophy of science has been particularly impressive during recent years. The basic assumptions of scientific method are gradually being revised, with the result that areas of investigation which have been closed for a century or more are now opening up. Two months ago, MANAS (Sept. 8) gave attention to a volume, *The Anatomy of Knowledge,* edited by Marjorie Grene, presenting the views of a number of contributors, all critical of tendencies inherited from the nineteenth century which "isolate from science the humanistic core of history and criticism," producing, instead of unified knowledge, "distortion and fragmentation." This book, issued by the University of Massachusetts Press in 1969, was the fruit of a study group which met at Bowdoin College during 1965 and 1966. The focus of this undertaking was the reform in the idea of scientific knowledge proposed by Michael Polanyi and elaborated in his book, *Personal Knowledge.*

A similar book is *Beyond Reductionism,* edited by Arthur Koestler and J. R. Smythies, published by Macmillan in 1970. Presented as "The Alpbach Conversations," this volume records the papers and discussions of sixteen participants in a meeting in a village in the Austrian Alps, where the concern was again with freeing science from the confining and distorting effects of nineteenth-century mechanism. On this occasion the collaborators were mostly biologists and psychiatrists, although an economist and some educators were present, too. The general conclusion was that the phenomena of life and intelligence are holistic and hierarchical in order, and cannot be understood by means of theories which reduce them to events determined by the laws of physics and chemistry. An extraordinary range of experience and observations is brought into view by these scientists, who categorically reject the conception of "the universe as a great system of physical forces, and the mind with all its powers of imagination and creative insight as a mere by-product of those forces." Their rejection, however, as offered in this volume, is based on particular experiments and observations made by each of these researchers in his own field. The climax of the criticism is reached with the contribution of Viktor Frankl, who shows, as a summarizing conclusion puts it, "how false beliefs of this kind can lead to some of the major psychiatric disorders current in the world today." Reductionism, according to Frankl, "is the nihilism of today."

These will be found welcome utterances by many readers. *Beyond Reductionism* is a valuable work and should be widely influential. Yet the general reader may have a complaint to make. It is not clear to whom he should address his dissatisfaction, or that anything can be done about the fault he finds, yet the complaint should certainly be heard. It is that the deliberations of these extraordinarily talented and well-informed men seem to proceed in a universe of discourse set apart from the rest of us ordinary mortals, it being quite certain that no "general reader" could possibly "understand" more than a fraction of what is communicated in such a volume. Each one of the contributors has given a lifetime to the research on which he reports. There is, then, a sense in which he must be "trusted." For even if the general reader could by an enormous effort fit himself to absorb knowledgeably *one* of these papers, there would still remain fifteen more to grasp and evaluate. It is not quite this bad, of course, for, as the discussions show, the participants in the conversations understood one another pretty well, or seemed to. But even so, there are difficulties for the lay person, as is aptly illustrated when Arthur Koestler persists in asking

one of the biologists about the possibility of evolution being in some respects "Lamarckian." Koestler's questions issue from a fairly sophisticated brand of common sense, but the dialogue which ensues is pretty unequal, simply because Koestler is not a "specialist" in evolution theory.

Yet there is a sense in which these writers deserve some trust; and the fact is that we are obliged to trust a great many people in a great variety of connections, simply to get through life. So some suitable trusting is not at issue; perhaps the feeling of discomfort ought to be traced to the fact that becoming a knowledgeable and well-informed scientist is not the climax of human development, so that a gathering of scientists does not really represent our own sort of knowledge, carried to a higher power, but something different, a special sort of learning that is not directly geared to life as the rest of the world lives it.

This is not just a complaint that the advanced science of these men is "difficult." Actually, what saves the book is the hidden longing on the part of all the contributors to be "relevant," and the obstacles they are working through are indeed the result of the vast irrelevance to mankind of a science which, until very recently, has been totally uninterested in the human qualities of human beings.

Manifestly, in a problem of this sort, what we need or should like to have is a *model* of an ideal society in which the possessors of scientific knowledge maintain a closer, more "organic" relationship with the life of the people in general. There is no such model, although there are, here and there, individuals who might qualify as generators of a field of teacher-student relationships of the sort we are trying to suggest. Basically, what is involved is a radical change in the idea of knowledge—quite conceivably, knowledge which does not touch and move human beings, in at least some of its dimensions, ought not to be called "knowledge" at all. This conception of epistemological reform fits quite well with Ivan Illich's ideas about the changes that are needed in technology and the tools of education. A product which does not lend itself to human development, which closes out human understanding of how it works instead of helping people to become participants in its manufacture and repair, is simply not a good product. It may be only a technological monstrosity, something devised by distorted men guided by distorted motives, and which can have only a distorting effect on the people who buy it.

Here, an interchange in the discussion period following Viktor Frankl's talk becomes pertinent. Bärbel Inhelder, an associate of Jean Piaget, asked Dr. Frankl about the possible causes of the feeling of existential emptiness so common today:

> If students today experience this feeling of emptiness is it not because we who teach them do not sufficiently convey our enthusiasm and our faith in scientific research? Is this in your opinion a widespread sociological phenomenon in specific sections of society?
>
> FRANKL. I have a feeling you are right, and I would go even one step further by contending that the existential vacuum in the youngsters is reinforced by the existential vacuum they feel in their teachers. But you must distinguish between two generations of professors. The older professors, they still have their idealism and enthusiasm, although it is some old-fashioned type of idealism, but to the youngsters this is preferable—as compared to the emptiness of the younger professors, those between 30 and 40. This is a remarkable fact. I have been lecturing at over a hundred universities within the United States alone, and also at universities in Australia, South America, Africa, Japan and Israel. I can only speak of Impressions, but what I said is my impression. Something else might be of interest to you: some time ago I made a statistical research among my students. Forty per cent of the Swiss, West German and Austrian students confessed that they knew from their own experiences the existential vacuum, this inner void and emptiness. Among my American students, however, the percentage was not 40 but 81%. At least partially, I think, this might be traced to reductionism, which is more prevalent, I find, on the campuses of American universities than in central European universities.

One could say that any science which has a part in the responsibility for such a psychological condition is due for radical reform—and, indeed, it is this realization which made the occasion for the dialogue reported in *Beyond Reductionism.* One has the feeling, however, that filtering the reflections and decisions made at the level of the Alpbach Conversations down to the market places and byways of everyday life is likely to be a very slow process, and one longs for another kind of practice of science education to hasten the reform. Viktor Frankl, who is surely doing his part in this respect, shows how the experience of direct contact with "the man in the street" helps to provide his science—which is psychiatry—with a common humanistic language well within the grasp of the general reader:

> . . . we find that there are three principal ways of finding meaning in life, in any condition, even the most adverse conditions. The man in the street will teach you, if you analyse him adequately, that life can be meaningful by a deed we are doing, or by experiencing what is good and beautiful and true in the world; but if need be also by the way in which a man is shouldering his unavoidable, unchangeable fate in a heroic way, thereby transmuting and turning tragedy into triumph. The man in the street is fully aware, although on a nonverbal level, that this is possible, and if time could allow, I could offer you evidence, drawn not from philosophers, but evidence drawn from utterances of prisoners in California's ill-famed San Quentin Prison—prisoners who were confronted with the gas chamber in which only recently a man had to die. . . . Well, these people may teach us what's going on in a man who is setting out on a valuing process. Man does not originally interpret himself, say, as a battleground of civil war between the id, ego, and super-ego. But the man in the street has a basic self-understanding and interprets his own existence as being involved in situations that constitute a challenge, situations that "mean" something to him; anyhow he feels that he has to try hard to do his best, to seek out, to smell out, to sort out the meanings, as it were. And if you systematize this knowledge drawn from the man in the street, you arrive at a phenomenological analysis o£ the valuing of experience in the sense of "finding meaning."

There is a considerable abyss, however, which separates the sanctified common sense of Viktor Frankl from the content of the other contributions to this volume. Except for Arthur Koestler, who is more of a writer and novelist than a scientist, the other participants in the Conversations are mainly occupied with removing theoretical barriers to holistic thinking rather than developing the implications of the freedom so obtained. It is difficult, of course, to see what else scientists can do at the present stage of their efforts to set new currents going in scientific thinking. The purpose of the conference, as Koestler explains in his opening remarks, was to bring out into the open what one of the participants, W. H. Thorpe, a Cambridge zoologist, had termed "an undercurrent of thought in the minds of perhaps hundreds of biologists," who are critical of the totalitarian claims of the neo-Darwinian orthodoxy. These are investigators who

> refuse to believe that the so-called Synthetic Theory provides all the answers to the problems posed by the phenomena of evolution; and who feel that the theory reflects part of the picture but not the whole picture. Such critical tendencies are also in evidence in the other life sciences, from genetics to psychology. There is, for instance, a growing conviction among psychologists that the behaviourists' S-R schema of chained responses, for all its historical merits, is changing from a once useful tool into an impediment to future progress. The common target of these "Holy Discontents"—to quote John Donne—seems to be what von Bertalanffy called the robotomorphic view of man, or more soberly, the insufficient emancipation of the life sciences from the mechanistic concepts of nineteenth-century physics, and the resulting crudely reductionist philosophy.

The key paper in the volume, which set the tone of the discussions, is "The Living System" by Paul Weiss, of Rockefeller University. Dr. Weiss presents much evidence to show that the mechanistic view of the behavior of living organisms cannot be applied to the multitudinous supportive processes of life within the cells and organs, which function in ordered hierarchies, achieving a constancy which may suggest

determination in its final effect, but which are astonishingly "free" at the micro-level of their operations. Nineteenth-century mechanism would require that the principle of isolated causation be traceable down to the smallest element or factor in the chain, but Weiss finds exactly the reverse situation. The tiny elements of the cell, *when* functioning as part of the cell, behave in ways which cannot be explained except in terms of the behavior of cells as living systems, which leads him to declare an old principle with a new meaning:

> When people use the phrase *"The whole is more than the sum of its parts,"* the term *"more"* is often interpreted as an algebraic term referring to numbers. However, a living cell certainly does not have more content, mass or volume than is constituted by the aggregate mass of molecules which it comprises. As I have tried to illustrate, . . . the *"more"* (than the sum of parts) in the above tenet does not at all refer to any measurable quantity in the observed systems themselves; it refers solely to the necessity for the observer to supplement the sum of statements that can be made about the separate parts by any such additional statements as will be needed to describe the *collective behaviour* of the parts, when in an organized group. In carrying out this upgrading process, he is in effect doing no more than *restoring information content* that has been lost on the way down in the progressive analysis of the unitary universe into abstracted elements.

In his conclusion, Dr. Weiss asserts that the absence of determinism at the micro-level of the vital processes of living things has the effect of removing "the spurious objections and injunctions against the scientific legitimacy of the concept of freedom of decision that have been raised within the scientific sector." He adds: "I cannot see that science can prove free will, but, on the other hand, I can see nothing in what we know in the life sciences that would contradict it on scientific grounds."

Since this question is, so to speak, the "moral" aspect of the issue of determinism, it was of recurring interest during the discussions. Later, Arthur Koestler offered the following reflections:

> Playing around with this problem is like playing chess, which I find aesthetically very satisfactory. However, if a kind of mad Caligula were to decide that there should be a game of chess and the loser should be put to death, then suddenly it would become a very serious game. Now, in one respect the mind-body problem is that deadly game of chess—I mean in its applications to the criminal code. The code is based on the axiom of free will, of criminal responsibility, on you "ought" to have acted this way or that. Now what that "ought" means here is that the subject A in the situation X *should* have acted differently and not in the way that he did—which in fact means that either the situation should have been Y not X, or the subject should have been B not A. In contrast to our criminal code, however, our whole social philosophy is based on either a crude determinism of the behaviourist kind or a crude sort of Darwinian determinism. So, the practical interpretations of the mind-body puzzle can be really quite deadly. I have tried to propose a solution for the problem of free will as applied to concrete everyday ethics, and I have come up with a kind of schizophrenic answer. But it is a very healthy sort of schizophrenia. That is to say, that I have the subjective experience of freedom and I accept it at face value, but I deny that anybody else has a free will (laughter). For men this is the only acceptable and practically applicable ethical attitude. Because it prevents me from getting angry with John Smythies, because the poor chap can't help it. I am not allowed to hang him, I am not allowed to sentence him to death because the poor chap could not help it, because he could not act otherwise than he did. But I cannot permit myself the same indulgence. I have an excuse for you but not for me. So the maxim I propose boils down to a variant of the French maxim *tout comprendre c'est tout pardonner.* And the variant goes: *tout comprendre ne rien se pardonner.*

One thing can be said about this book: It is a fine illustration of how extremely able scientists think when they are at work; and it shows, also, the gradual transformation of the direction of scientific inquiry, revealing, at the same time, the slow pace of "progress" that is required if they are to remain "scientific."

Something should be said about the contribution of F. A. Hayek, who spoke on "The Primacy of the Abstract." This is an effort to restore capacity and autonomy to the mind, as

representing the innate capacity of man as a thinker. It is the ability to think abstractly, Hayek maintains, which makes the perception of particulars possible, and, as he says, "when we want to explain what makes us tick, we must start with the abstract relations governing the order which, as a whole, gives particulars their distinct place."

Michael Polanyi and L. L. Whyte are frequently mentioned by the contributors to the Alpbach Conversations, and also Noam Chomsky, whose linguistic conceptions have much in common with the proposals of Prof. Hayek.

It is clear enough from books of this sort where the growing tips of scientific philosophizing are now to be found. Yet we are still a long, long way from a unified culture in which there are direct connections between the thought of the best of men and the desired social forms. In short, there is, as was suggested earlier, no model to point to as yet, as a means of expediting the realization of such a culture. The very isolation of scientific thinkers from the currents of ordinary life suggests that the authentic initiative lies elsewhere, with men and women who possess greater capacity for identification with the common problems and difficulties of mankind.

REVIEW
MASLOW ON HUMAN POSSIBILITY

THE first posthumous work by Abraham H. Maslow, *The Farther Reaches of Human Nature* (Viking, $12.50), a large volume made up of some of his later papers, as selected by this distinguished psychologist during the last months of his life, is now available. The book lives up to the promise of its title, since most of the papers deal with the higher possibilities of human beings and embody the philosophical tendencies which seemed in full flower at the time of Dr. Maslow's death in June, 1970.

In the first paper, following a characterization by Maslow of himself as a humanistic psychologist who was working on a psychology of transcendence, there is a passage in which he speaks of the kind of work he felt called to do:

> It is my personally chosen task to "speculate freely," to theorize, to play hunches, intuitions and in general to try to extrapolate into the future. This is a kind of deliberate preoccupation with pioneering, scouting, originating, rather than applying, validating, checking, verifying. Of course it is the latter that is the backbone of science. And yet I feel it is a great mistake for scientists to consider themselves *merely* and only verifiers.
>
> The pioneer, the creator, the explorer is generally a single, lonely person rather than a group, struggling all alone with his inner conflicts, fears, defenses against arrogance and pride, even against paranoia. He has to be a courageous man, not afraid to stick his neck out, not afraid even to make mistakes, well aware that he is, as Polanyi has stressed, a kind of gambler who comes to tentative conclusions in the absence of facts and then spends some years trying to find out if his hunch is correct.

For all that, the reader is made very conscious of the fact that Maslow keeps his feet on the ground. The making of hypotheses is part of the practice of science, and Maslow is always careful to construct his theories in a form that will make them susceptible to verification. In studying this man, the reader comes into contact with a scientific psychologist who is amazingly free from preconception, and this seems to be the case because he, Maslow, has an active and sensitive imagination. Being so endowed, he is simply unable to rest content with conclusions which do not have an element of discovery for him in them. Whatever he says, therefore, has a fresh quality about it.

There is one other quality which distinguished him from the great majority of psychologists. He is intensely interested in finding and showing the means by which other people can learn to be healthy, productive, happy human beings. He is therefore a teacher as much as anything else, perhaps more than anything else. Since health was for him the objective, he did not study "average" people, but the ones who showed that they knew how to become healthy and stay healthy. He gathered what he called "growing-tip statistics." He justified this selective approach by saying:

> If I ask the question, "Of what are human beings capable?" I put the question to this small and selected group rather than to the whole of the population. I think that the main reason that hedonistic value theories and ethical theories have failed throughout history has been that the philosophers have locked in pathologically motivated pleasures with healthily motivated pleasures and struck an average of what amounts to indiscriminately sick and healthy, indiscriminately good and bad specimens, good and bad choosers, biologically sound and biologically unsound specimens.
>
> If we want to answer the question how tall can the human species grow, then obviously it is well to pick out the ones who are already tallest and study them. If we want to know how fast a human being can run, then it is no use to average out the speed of a "good sample" of the population; it is far better to collect Olympic gold medal winners and see how well they can do. If we want to know the possibilities for spiritual growth, value growth, or moral development in human beings, then I maintain that we can learn most by studying our most moral, ethical, or saintly people.
>
> On the whole I think it is fair to say that human history is a record of the ways in which human nature has been sold short. The highest possibilities of human nature have practically always been

> underrated. Even when "good specimens," the saints and sages and great leaders of history, have been available for study, the temptation too often has been to consider them not human but supernaturally endowed.

This is another theme of Maslow's work and research—that the qualities which lead to self-actualization in human beings, and which find their climactic expression in the peak experience, are qualities *natural* to human beings; they are a potentiality of all men and therefore an expression of nature, just as man is a natural being. At the hands of Maslow, "Naturalism," as a philosophy, is no longer a form of reductionism, but offers an enormous enrichment of the possibilities of the natural. The final paper in this volume, "A Theory of Metamotivation," presents twenty-eight theses concerning the higher motivations which may come into play, and in some cases dominate, in the lives of human beings, and which he regards as "testable propositions." The purpose of this paper, one could say, is to hold up for inspection a chart or map of a very large field of "reality" which has been almost entirely neglected by conventional psychology. In one table, two pages are devoted to listing the higher motivations of self-actualizing people. At the beginning are gratifications such as "Delight in bringing about justice; delight in stopping cruelty and exploitation; fighting lies and untruths." Then, at the end of the list are the following:

> They enjoy watching and helping the self-actualizing of others, especially of the young.
>
> They enjoy watching happiness and helping to bring it about.
>
> They get great pleasure from knowing admirable people (courageous, honest, effective, "straight," "big," creative saintly, etc.). "My work brings me in contact with many fine people."
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> They enjoy taking on responsibilities (that they can handle well), and certainly don't fear or evade their responsibilities. They respond to responsibility.
>
> They uniformly consider their work to be worthwhile, important, even essential.

An attempt to get such people to "explain" why they are motivated in this way doesn't bring illuminating answers. The "good" in what they do is felt to be simply self-evident. Maslow says:

> It is possible to classify these moments of reward, and to boil them down into a smaller number of categories. As I tried to do this, it quickly became apparent that the best and most "natural" categories of classification were mostly or entirely abstract "values" of an ultimate and irreducible kind, such values as truth, beauty, newness, uniqueness, justice, compactness, simplicity, goodness, neatness, efficiency, love, honesty, innocence, improvement, orderliness, elegance, growth, cleanliness, authenticity, serenity, peacefulness, and the like.
>
> For these people the profession seems to be *not* functionally autonomous, but rather to be a carrier of, an instrument of, or an incarnation of ultimate values. For them the profession of law, for example, is the means to the end of justice and not an end in itself. Perhaps I can communicate my feeling for the subtle difference in this way: For one man the law *is* loved because it *is* justice, while another man, the pure value-free technologist, might love the law simply as an intrinsically lovable set of rules, precedents, procedures without regard to the ends or products of their use. He may be said to love the vehicle itself without reference to its ends, as one loves a game which has no end other than to be a game, e.g., chess.

These twenty-eight propositions amount to the structuring of the sort of moral and intellectual universe in which self-actualizing people live, and it was the achievement of Maslow's life to erect this structure as a permanent work of his synthesizing imagination, generalizing from his observations of hundreds of subjects, formulating principles of what could be called a trans-personal psychology, and showing that the highest reaches of human development lead quite naturally to participation in a life at this level and in terms of these values, which he identified as B-Values (B standing for Being). The concluding proposition is this, followed by comment:

> *Many of the ultimate religions functions are fulfilled by this theoretical structure.*
>
> From the point of view of the eternal and absolute that mankind has always sought, it may be that the B-Values could also, to some extent, serve

> this purpose. They are, *per se* in their own right, not dependent upon human vagaries for their existence. They are perceived, not invented. They are transhuman and transindividual. They exist beyond the life of the individual. They can be conceived to be a kind of perfection. They could conceivably satisfy the human longing for certainty.
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> And yet they are also human in a specifiable sense. They are not only his, but him as well. They command adoration, reverence, celebration, sacrifice. They are worth living and dying for. Contemplating them or fusing with them gives the greatest joy that a human being is capable of.

This book includes an appendix giving a complete bibliography of Maslow's writings. Among papers deserving particular attention is one in which Maslow discusses the fusion of fact and value, and another which presents extracts from Ruth Benedict's unpublished writing on high synergy and low synergy societies. But we shouldn't speak of any paper as deserving "particular" attention, since practically everything in this book will be found of enduring interest, and readers who have already come to some appreciation of the revolution in psychology accomplished by Dr. Maslow will value it as a climactic expression of his thinking.

COMMENTARY
DID WE NEED "PERMISSION"?

THE willingness of distinguished natural scientists to concede and even urge the possibility of free will (see lead article) recalls a paper by Douglas Clyde Macintosh (of Yale University) which appeared in the *Journal of Philosophy* for Jan. 18, 1940. Dr. Macintosh pointed out that no moral responsibility could exist for human beings in a universe completely ruled by deterministic forces. This is of course openly admitted by the behaviorists, as shown recently by B. F. Skinner's *Beyond Freedom and Dignity*. (Perhaps *Beneath* as the first word would have made a more accurate title.)

As part of his paper, Dr. Macintosh introduced a brief "poem" which now seems appropriate to reprint again (we have used it before). It was composed by one of the examiners of a candidate for a doctoral degree, who in his thesis on (against) free will had maintained that no rational basis for responsibility in human conduct could be found. This assertion led the examiner to wonder why the student thought he deserved recognition for the work he had done. He addressed the candidate:

> Here's a question; if you can, sir,
> Please supply a simple answer.
> Was your novel dissertation
> Product of predestination,
> Result of native drive and knowledge,
> Effect of home and school and college?
> Why, if so, should *you* have credit,
> Even though your name may head it?
> Why not graduate some actor
> Who died ere you became a factor?
> If, however, no causation
> Accounts in full for its creation,
> Why should *you* be made a doctor,
> And not some other don or proctor?

One part of Dr. Macintosh's paper seems so well and simply argued that we add it here:

> In addition to whatever partially predetermining factors there may be, may not the conscious, purposing self of the moment of decision, of choice and action, be, within whatever limits, a creatively determining factor in the voluntary deed? . . . If character changes at all—and it certainly does—why may it not change to some extent *in the decision*, and not simply before or after it? May not partial self-transcendence be of the very nature of free decision, at least in every instance of momentous deliberate decision?
>
> The character of the thinking, willing self is, in its thinking and willing, in process of change. The character of the self is changing, coming to be, *in* its conduct, and not simply as an after-effect of its conduct—certainly not as a mere result of completely determined conduct. . . . We are participants in the causal progress, agents who as causes do something to bring about the emergence of the effect.

Some day we shall probably be a little ashamed of ourselves to think that we once felt it necessary to have the permission of physicists and biologists to reason as Dr. Macintosh has. In any event, we do have this permission today, as *Beyond Reductionism* makes clear. Will we require some similar permission, now, to begin to reason as Emerson did in his essay on "Compensation"? For that, surely, is the next step in understanding the full meaning of responsibility.

CHILDREN
. . . and Ourselves
THE WRONG KIND OF PAIDEIA

WHILE musing over the implications of Ronald Gross's discussion of "Free Learning," printed here a month ago (Oct. 20)—especially the idea that not just the schools, but the entire social community, educates the young—we came across a quotation from a novel by James Fenimore Cooper which shows how far back we have to go in American history to locate the tendencies spoken of by Charles Silberman: "The weakness of American education is not that the paideia does not educate, but that it educates to the wrong ends."

Cooper's first venture into social commentary—he was of course known as the author of *The Last of the Mohicans*—came in 1828 with publication of *Notions of the Americans.* This book, as Douglas Miller says in *The Birth of Modern America,* "painted an Arcadian picture of a settled and virtuous farming people content with hard work and simple pleasures." Ten years later he returned from a trip abroad to discover an entirely different spirit. He then wrote a novel which was a biting caricature of American life. Cooper's spokesman in *Home as Found* condemned American business as an example of "all principles swallowed up in the absorbing desire for gain." He added: "The entire community is in the situation of a man who is in the incipient stages of an exhilarating intoxication, and who keeps pouring down glass after glass, in the idle notion he is merely sustaining nature in her ordinary functions."

Whatever the exaggerations in Cooper's book of 1838, the astonishing thing is his accuracy in describing the claims of economists of a century later, who insisted that modern industry, in flooding the market with hardly needed commodities, was merely responding to the natural law of demand!

This view has become almost the ruling principle that shapes our modern *paideia.* Writing for the *Saturday Review* back in 1966 (May 21), Joseph Wood Krutch drew an interesting comparison between book publishing and television. The writers and publishers of books, he said, naturally hope that their respective enterprises will pay, often because if they do not, writers and publishers would have to find some other way of making a living. Yet the question of "profitability" is not the *only* question that is asked. Profitability is, you could say, a necessary but not sufficient reason for a publishing venture. And some publishers are proud to issue at least a few books simply because of a conviction that they ought to be in print.

Television, however, is another affair. Mr. Krutch wrote:

> It is discouraging to observe that the newest medium of communication comes nearest to accepting the profit motive as the *only* motive, and the great difference between television networks and publishers is simply that many publishers do take some pride in being responsible for things which they themselves, as well as the public, admire. The networks, on the other hand, despite occasional boasts about this or that sacrifice in the public interest, come much closer in profession as well as practice to saying simply, "We consider it our business to ask nothing except whether this or that program will win the largest possible audience and therefore most please the most profitable advertiser." Here, for example, is a pronouncement from Julius Babbathan, vice president and general manager of ABC, as quoted in *News-week,* November 11, 1963:
>
> > "What do you mean by 'caliber programs'? I'll tell you what it means to me. It means a guy sitting there in front of a TV, with a hero sandwich in his hand and a glass of beer, saying, 'That's a program I'd like to watch."

Mr. Krutch broods about the effects of this "ideal" on the TV-watching public, and finds this sort of programming especially obnoxious when he considers that television is practically a non-competitive business, since virtual monopolies are granted by the government to only a few corporations. He recalls the theater-going public

of Periclean Athens, and wonders if the Athenians would have put up with the modern degradation of taste. And he notes that "a few centuries later the Roman emperors decided to try to keep the populace manageably docile by giving them precisely what they wanted, and then the drama gave way to musical vaudeville, and finally almost entirely to gladiatorial and wild beast combats." Krutch also quotes John Stuart Mill to the effect that men "addict themselves to inferior pleasures, not because they deliberately prefer them, but because they are either the only ones to which they have access, or the only ones they are any longer capable of enjoying."

In essays like this one by Mr. Krutch—a man of both warm-hearted and critical intelligence who is no longer with us—we find intimate characterization of the *paideia* to which both young and old have been exposed, by various means, and in increasing intensity, ever since Cooper, to pick a starting date.

What goes with this "educational" influence? In a paper prepared in 1969, "The Nature of Our Changing Society: Implications for Schools," Willis W. Harman surveys long-term trends in the United States and finds two "unsolvable macroproblems" plainly apparent. One is made up of the uncontrolled "Faustian powers" set loose by scientific technology; the other is the spreading poverty of the underdeveloped nations. Of the first, Mr. Harman writes:

> The "Faustian powers" humanity has gained through rampant development and application of technology have already brought us to the threshold of overpopulation (through technology-reduced mortality rate); pollution of air, water, and soil; extensive unemployment of the unskilled; paralyzing air and surface traffic congestion around urban centers; and the threat of nuclear holocaust. These have been the consequence of the unspoken policy that whatever technology would make a profit for an individual or an organization, or would contribute to a nation's ability to carry on warfare, that technology would be developed and applied. But now this policy has brought us to what Archibald MacLeish has called "the Great American Frustration"—the feeling that we "have somehow lost control of the management of our human affairs, of the direction of our lives, of what our ancestors would have called our destiny."

Of the underdeveloped peoples, he notes that even maintenance of existing conditions in these countries is not possible, in consideration of population growth, and the goal of middle-class affluence as enjoyed by the advanced nations seems completely beyond reach, since the "prosperous" nations do not find it politically feasible to enable these countries to progress to the "take-off" point of independent development, and private capital is not interested in the long-delayed pay-off such investments would represent. In consequence, the gap between the industrialized and underdeveloped nations widens, "in spite of deliberate programs aimed at closing it."

This, too, is a part of the *paideia* which surrounds the present generation, creating the atmosphere of passion, blame, and anxiety which comes into focus in the news of the day. What, indeed, shall we expect of the schools, harassed, criticized, over-populated, and bitterly disliked if not hated by those whom they are expected to serve?

In a consideration of the choices before educators, Mr. Harman observes:

> The basic issue for education is the choice of goals; all else follows this. What is it we are trying to do? But for this statement to make sense we have to be using the word choice in the sense of a commitment of psychic, human, and economic resources in a particular direction. In that sense the choice is not necessarily what the society or its leaders may declare it to be. The choice is, rather, inferred from where the society puts its resources. . . . This is mainly to say that the goals of the educational system are much more a function of the choices the society has made or is making, than they are a consequence of the declarations of educational leaders. When George Counts in 1932 issued the inspiring challenge, "Dare the schools build a new social order?", an appropriate answer might have been, they can't. The social order can barely build new schools.

At the end of his paper, under the heading, "Education's Necessary Task," Mr. Harman writes:

> The temptation is strong in us to ignore forecasts of unpleasant events. When student use of psychedelics had just started, the dear forecast was that if highly punitive legislation and complete proscription were attempted, all the ills of prohibition days were an inevitable consequence. This knowledge failed to avert the adoption of exactly that course.
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> Similarly, present forecasts of environmental deterioration, population pressures, traffic congestion, famine, Third-World uprisings, radioactive waste, agrichemical contamination, water pollution, and a host of similar indicators of social dysfunction, spell inevitable trouble ahead. Yet we procrastinate. If the analysis of "unsolvable macroproblems" is at all on the mark, these troubles will not be avoided by the usual muddling through. A drastic and rapid shift in orientation is imperative, on the part of the entire industrially developed segment of the world. Nothing less than a new guiding philosophy will do.

Mr. Harman goes on to make a number of practical suggestions. Quite likely a copy of this paper can be obtained by writing to him at the Educational Policy Research Center, Stanford Research Institute.

Here we should like to propose that in a period of cultural lag and bureaucratic lethargy such as now exists, the attempt to alter existing institutions is almost certain to end in failure. Effort more likely to bear fruit will be at the micro-level, where the strength of individuals and small groups can still make itself felt. The "unsolvable macroproblems" are unsolvable precisely because they have grown through many, many years from the micro-situations where they began to the massive statistical realities of the present. They are unsolvable *as* macroproblems, but inventive individuals can always begin to devise ways around them, and to stop nourishing the soil in which they grow. Just as the failure of the churches makes every man his own priest, so the failure of the schools makes every parent a teacher. As Maslow put it in another connection, "If we understand the situation well enough, we can feel quite proud of the amount of change which a single person can make."

FRONTIERS

A Useful Booklet

A REVISED edition of *A Manual of Simple Burial*, put together by Ernest Morgan, and published by the Celo Press, Burnsville, North Carolina, is now available. This booklet performs a much needed service, as the following extract from its contents at once makes clear:

> We have, in the United States and Canada, an amazing custom of displaying dead bodies in a costly and elaborate routine. Each year, in response to this custom nearly two million American families put themselves through an emotional ordeal and spend upwards of two billions of dollars doing so.
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> When death occurs in a family in which there has been no planning, the survivors find themselves virtually helpless in the face of entrenched custom, and dealing with a funeral director who expects them to follow this custom. Through advance planning, however, a family can have the precedent, information and moral support needed to get the type of service it wants.
>
> Advance planning is needed, not alone in making arrangements with funeral directors, but for working out understanding within the family. A young man killed recently in an accident left a widow and young children with no savings. Both husband and wife believed in simple burial, and the widow was fortunate in getting a funeral director who encouraged her to carry out her desire for a simple and economical arrangement. The young man's mother, however, though she was unable to help with the expenses, insisted on an elaborate funeral.
>
> Since there had been no advance planning, the wife was unable to resist and not only had to endure a type of ceremony which was distressing to her, but had to face life with small children, her husband gone, and a thousand-dollar funeral debt hanging over her. . . .
>
> To help with advance planning, non-profit funeral and memorial societies have been formed in some 120 cities in the United States and Canada. These societies cooperate with funeral directors, sometimes by having contracts with them and sometimes by advising their members as to which firms provide the desired service.

While MANAS gave attention to this booklet a few years ago, we are glad to do so again, since the present edition provides an up-to-date list of the various memorial societies around the country. Economy is not, of course, the only consideration in connection with a funeral and burial, but economy is important to many people, and the simplicity naturally associated with economy even more so. The *Manual* gives all the information one will need to plan for simple, tasteful burial or cremation. There are several brief essays dealing with various aspects of the problems which occur at death. The question of financial resources is discussed, including a note on death benefits which may be provided by Social Security. Funeral prepayment plans are reviewed, and also the pre-need purchase of cemetery space.

The simplest cooperative arrangement is the "burial committee," of the sort provided by several Friends Meetings, in which the practical needs of cremation or burial are cared for voluntarily by friends of the deceased. This is practicable only where there is sufficient community spirit to make possible such voluntary, friendly service, yet as a simple solution at the time of death it seems best of all. A helpful checklist of things to be done is provided as a guide to those who will take responsibility when a member of the family or a close friend dies. There are several pages of suggestions concerning funeral and memorial services.

A major section of the booklet is devoted to the Continental Association of Funeral and Memorial Societies, which has headquarters at 59 East Van Buren Street, Chicago, Ill. 60605. This organization represents more than a hundred affiliated funeral and memorial societies and circulates a brochure concerning the services of these groups. Their history is briefly recited:

> The first memorial societies were formed in 1939. The early groups were successful, but attracted little attention and had little contact with one another. In the 1950's they began to appear more frequently and by the end of the decade had become an active continental movement. In April, 1962, on the

initiative of the Cooperative League, a meeting was called in Chicago to explore the possibility of setting up a continental organization.

This was done a year later and by 1965 the Continental Association was well established in its own offices and had begun to supply informative literature to groups wishing to form memorial societies. Useful information in relation to legal and legislative problems is provided by the national organization.

In evidence of the value of the work of these societies to their members, it is reported that during 1969 the Peoples Memorial Association, of Seattle, Washington, helped its 658 members to get exactly the services they desired, at savings estimated to be about $750,000. "Yet the one-time membership fees paid by these members totalled less than $3300."

Finally, the *Manual* contains a complete list of the member societies of the Continental Association, given by states, so that the reader will have no difficulty in locating the one nearest to where he lives. Also listed are the phone number, the number of family members, the initial fee (the only charge, ranging from $3 to $15, which is paid once), and the typical minimum funeral cost, of each society. As to funeral cost, the highest (minimum) figure appearing in the first two pages of listings is $350, while a more common figure is $150 or $200.

Copies of this booklet may be obtained from the Celo Press, which is operated by the Arthur Morgan School, Box 79, Route 5, Burnsville, North Carolina 28714. The price is a dollar.