A COST ACCOUNTING

CONVENTIONAL ideas about "knowledge," or what people regard as being important to know, practical protection require some from contradictory experience in order to maintained. A man's sense of being able to cope with life, for example, often depends mostly on his feeling of knowing how other people do their coping—on being an expert in the customs and practices of his group. He wants what all these people do to remain a reliable guide. It seems natural to take instruction from our fellows in such matters. One generation teaches the next. And there are organs of common opinion which stereotype these familiar patterns of behavior, internalize enabling people them unquestioned rules for getting on in the world. The instructions include ideas of "morality" and provide directions for guarding the social community against "unhealthy" influences.

Ortega, in *Man and People* (Norton paperback), gives these ideas a clear characterization:

... these opinions are in fact established usages, and "established" means they do not need support and backing from particular individuals or groups, but that, on the contrary, they impose themselves on everyone, exert their constraint on everyone. It is this that leads me to call them "binding observances." The binding force exercised by these observances is clearly and often unpleasantly perceived by anyone who tries to oppose it. At every normal moment of collective experience an immense repertory of these established opinions is in obligatory observance; they are what we call "commonplaces." collectivity, does not contain any ideas that are properly such—that is, ideas clearly thought out on sound evidence. It contains only commonplaces and exists on the basis of these commonplaces. By this I do not mean to say they are untrue ideas—they may be magnificent ideas; what I do say is that inasmuch as they are observances or established opinions or commonplaces, their possible excellent qualities remain inactive. What acts is simply their mechanical pressure on all individuals, their soulless coercion.

This general scheme of psycho-social control is easy to illustrate. A boy or girl whose family has moved to a strange town spends the first day at school cautiously studying the binding observances in force among the children. He may be hoping to lose himself in the crowd, or perhaps considering how far he can go in introducing the customs he is familiar with in order to feel more "at home." More rarely, he may simply inspect the going social patterns in the class as a practical matter, being confident that he can adjust as much as kite needs to, to whatever goes on, and pursue his way with some personal independence.

In any event, there is a latitude of freedom within any area covered by a set of binding social observances, and it is reasonable to add that the more "mature" the social group involved, the greater the freedom of individual action it allows.

Yet we are obliged to notice that *total* freedom is practically impossible to imagine, no matter how ideal the society. We may think of it as an objective to strive for, but we know that some Archimedean "whereon to stand" will always set limits. We could say that it is the duty of utopian thinkers to give that least limiting social ground some hypothetical definition.

The question is: Should the hypothetical social base be conceived of as requiring a firm "social science" foundation in behavioral fact—with, that is, a minimum of "binding observance"—or should it be conceived more as a fluid medium, always in flux, because of the needs of the growth, or at least the change, in man's ideas of what is true and good?

The relativist thinkers will of course declare for a fluid medium; and, as a matter of fact, the historical evidence is all on their side. There would indeed be no "history" without the phenomena of change—either gradual or sudden and catastrophic—in the patterns of which shape the life of human beings in societies. Yet the changes themselves gain significance only against the background of deep subjective longing for a stable base. The changes men are persuaded to make in their binding observances are usually in behalf of better ones which they hope will be more enduring, enabling them to live freer or more predictable lives. So, while the relativists seem to have the facts, universal human longing is for a secure and final foundation. The dispassionate relativist usually stands outside the flow of history. He has his truth, but he can't use it in No relativist ever inspired a great history. revolution.

Now and then a relativist thinker may feel able to say, "An absolute foundation for social good could exist, but it would not be what you think." Unfortunately, the voices of such men seldom have an influence on events. The only evidence we have for this view is that rare individuals have been known to walk through life sustained by some inner gyroscopic principle, wonderfully free of the external controls exercised by convention. But a *society* maintained by such invisible, unearthly balances—well, it seems a contradiction in terms! A colony of ants, a flock of birds? The best of analogies are either threatening, inadequate, or ambiguous.

Perhaps, as with some other indefinable excellences which have nonetheless come into being, such a society would have to be grown before it can be described, realized before it can be known.

Meanwhile, some gains in understanding may be possible from the study of inwardly balanced individuals. It is not so very uncommon to encounter a man who is pursuing a startlingly independent and sometimes quite fruitful existence in what is apparently total ignorance or defiance of matters which are ordinarily held to be the very crux of getting on. Actually, history reveals numerous instances of men who seemed to rise to high eminence more by ignoring "binding observance" than by following its dictates. Advances in science have certainly come in this way. Then, in a more domestic area, there is the homely girl who becomes enormously popular, or the tactless or unconventional man who, in the course of a few years, amazes everyone by his successes, by the stubborn way he goes at things. We are obliged to admit that the rule book of convention simply does not apply to these individuals. The reason that so little attention is paid to such people by psychologists (Dr. Maslow is a notable exception) is that it is impossible to explain them on ordinary grounds. The rules they follow are virtually unique, and only the "binding observance" sort of directions can be made simple and clear to others. No "scientific" formula can be deduced from their lives—which are, instead, quite patternless from any "objective" point of view.

Yet we can draw some negative and perhaps unsettling lessons from our experience of such people. The fact is that, within the limits of healthy adjustments to the necessities of social life, one finds individuals who make a much greater personal contribution to their own equilibrium than society knows about or is willing to recognize, but we can't tell how they do it. Whatever unique ability or talent these people possess, its nature is not disclosed, its rationale does not become evident. Recognizing this at least gives some explanation of why such capacity for independent balance is simply ignored as not within the scope of the present society's knowing. It is a principle alien to the whole idea of binding observance.

Can *nothing* be said about this principle? Well, we might say that it represents some half-conscious skill founded on what people are now beginning to call "self-knowledge," concerning which there is little or no tradition or discipline in the modern world. If we look for historical conceptions in this area, we are obliged to go

back thousands of years to ancient ideas of heroes and demi-gods, to mystical doctrines of selfdevelopment, to ordeals of initiation, and to psychological cosmologies which suggest that the systems of knowledge and conceptions of certainty now honored in the world may be but images inverted by reflection in grossly limiting present-day conceptions of earthly existence. The total lack in Western thought of explanations of individuals as centers of primary causation—as creators of actual fields of excellence and achievement—leaves us without any familiar idiom for considering such things. And the ancient idiom for thinking about causation in subjective terms is based upon a conceptual vocabulary which the scientific revolution has been used to discredit or obliterate from the memory of man.

What, precisely, was outlawed by scientific revolution? The answer is clear. The development of the scientific idea of causality has rendered meaningless the idea of human beings as conscious originators of cause. Men are but floating particles in the ceaseless flux of nature, according to scientific theory. This view of man, insofar as the scientific idea of causation became a "binding observance" in Western thought, may have worked a far greater emasculation of initiative and individual resourcefulness than we have any idea of. Let us trace the view from its approximate origins in the early seventeenth E. A. Burtt's The Metaphysical Foundations of Modern Physical Science is probably still the best and certainly the most convenient source for this kind of history.

Leaving aside the threats of clerical authority which made Galileo try to avoid all psychological considerations, we may note, first, his admiration Filled with a sense of the of mathematics. uselessness of scholastic syllogisms, he declared: "We do not learn to demonstrate from the manuals of logic, but from the books which are demonstrations, which the mathematical. logical." Galileo not the

concentrated, therefore, on natural phenomena that could be described and elucidated in mathematical terms. Following Democritus, he divided the qualities of physical bodies into the primary and secondary, the primary being those susceptible to mathematical treatment—size, weight, motion, etc. Prof. Burtt sums up Galileo's idea of nature, indicating its consequences for the world of subsequent thought that would in time adopt his conclusions as the true account of "natural reality":

Physical space was assumed to be identical with the realm of geometry, and physical motion was acquiring the character of a pure mathematical concept. Hence, in the metaphysics of Galileo, space (or distance) and time become fundamental categories. The real world is the world of bodies in mathematically reducible motions, and this means that the real world is a world of bodies moving in time and space. . . . Teleology as an ultimate principle of explanation he set aside, depriving of their foundation those convictions about man's determinative relation to nature which rested on it. The natural world was portrayed as a vast, selfcontained mathematical machine, consisting of motions of matter in space and time, and man with his purposes, feelings, and secondary qualities was shoved apart as an unimportant spectator and semireal effect of the great mathematical drama outside.

This was the vast *tour de force* accomplished by physical science—the substitution of mathematical description for the idea of causation. It was achieved, as Frederick Lange points out in his *History of Materialism*, against the intention and even the explicit objection of Isaac Newton:

Newton . . . clearly separated the mathematical construction he could supply from the physical [cause] which he could not find, and so he became, against his will, the founder of a new cosmical theory, containing obvious inconsistency in its first elements. His "Hypotheses non fingo" threw down the . old foundation of theoretical Materialism, in the same instant in which it appeared predestined to celebrate its loftiest triumphs.

We have already pointed out that Newton's peculiar service is, above all, to be sought in his completion of the mathematical proof. The thought, indeed, that the laws of Kepler are to be explained by

central force, which is inversely proportional to the square of the distance, had occurred simultaneously to several English mathematicians. Newton, however, was not only the first to reach the goal, but he accomplished the task with such masterly comprehensiveness and certainty, shed such a fulness of light over all parts of mechanics and physics, that the "Principia" would still be an admirable book, even though the main principle of the new doctrine had not been so brilliantly established itself. His example seems to have so dazzled the English mathematicians and physicists, that they lost their independence, and for a long time left the lead in the mechanical sciences to the Germans and the French.

From the triumph of this purely mathematical achievement there was curiously developed a new physics. Let us carefully observe that a purely mathematical connection between two phenomena, such as the fall of bodies and the motion of the moon, could only lead to that great generalization in so far as there was presupposed a common and everywhere operative physical cause of the phenomena. The course of history has eliminated this unknown material cause, and has placed the mathematical law itself in the rank of physical causes.

It is now time to make some practical accounting of the cost to human beings of this achievement. In the first place, the study of causation according to the model of the Newtonian World Machine—both intellectually exciting and pragmatically rewarding—was a powerful distraction from the idea of human beings as effective causes, which was totally deprived of its rationale. Men, of course, went right on with their causative behavior on the basis of common sense, but consciously considering themselves as centers of causation became increasingly improbable except in some traditional context that was rapidly being displaced as outmoded "superstition." The momentum of the cultural energy of the times was all in physical science. The idea of causation as fundamentally an act of consciousness was now a notion of only antiquarian concern. After all, the only really effective actor, in terms of consciousness and will, during the Middle Ages, had been God, and the elimination of this wild factor from the field of experience to be examined by science was

regarded as indispensable to all scientific progress. Further, it was the will of God, as historians and reformers could show, that had imposed such onerous confinements on the thinking of men, so that the "death of God," now finally acknowledged by some modern theologians, was a consummation devoutly sought by the early enthusiasts of science.

But what these champions of science overlooked, while rejoicing that Science had outlawed the will of God and replaced it with natural causation, was that this same natural causation would *also* come to exclude the will of man. This is a consequence of the complete externalization of the idea of cause—an effect that has only recently become manifest to students of the psychological impact of science on human thought.

The systematic displacement of even the common-sense idea of human beings as causal agents is the subject-matter of a paper by Granville C. Henry, Jr., who teaches mathematics at Claremont Men's College (published in the January, 1969 issue of the Blaisdell Institute *Bulletin*). So long, Prof. Henry suggests, as it was possible to think of scientific causation in terms of the machine model, people could without too much difficulty retain their sense of being themselves causes, since nearly everybody uses some kind of machine. As he puts it:

The point I want to make is that our conviction that we know what causality is at the mechanical level is due to our "placing" or transferring human common sense understandings of causality into some aspect of semi-formalized but primarily intuitive mathematics. When this mathematics is made more formal or more thoroughly objectified, the concepts of causality "placed" there, as we have observed, tend to be dissolved.

Prof. Henry devotes several pages to showing, however, that the sense of understanding causation in Newtonian terms is illusory, for the reason that the feeling of clarity we get from mathematical objectification comes in just at the point where "there is no explanation of cause."

The matter is exactly as Lange put it. Modern thought—or intellectual habit—"has placed the mathematical law itself in the rank of physical causes."

Prof. Henry seems to think that the nature of mathematical analysis itself precludes its use as an account of causation. The more complete the conversion of a branch of science into mathematical expression, he says, the less will that science be able to tell us about causation. The fault, doubtless, is not in our mathematics, but in unreasonable ourselves—in expectations concerning what the abstract science of relationships (mathematics) can do for us. Commenting on the theoretical inaccessibility of practical human or individual causation through the disciplines of science, Prof. Henry says:

The loss of the sense of causality is evident in many aspects of our culture today. I shall mention two. The current worldwide student unrest has its sources in the social and political and religious realms. Much of the protest, however, is simply an expression that the factual and theoretical data taught by colleges and universities do not tie in with appropriate sensitivities to nature, human problems, man's subconscious or an immanent God. There is a loss of the sense of causal connection between abstract objectified material and human experience. As these students tell me, it is not just that the scientific disciplines are hard or demanding, but that they do not allow one to know and experience the real world. Indeed, these disciplines often seem to hinder or obscure such experience. Contrast these attitudes with those of many of us who went into the study of the physical sciences because we "knew" they could tell us about the real world and would allow us a more intelligent and fuller experience of it.

The evidence for this analysis may seem vague and imprecise, but there is an overwhelming amount of it, along these lines, suggesting that we are on the eve of a great Reformation in the very idea of knowledge—which means, of course, in the idea of science as well. The change to be expected will doubtless cut across all of the departments of knowledge, yet will affect each area decisively. The symptoms of constructive change are already widely apparent, not so much

overtly in the universities, but rather in individuals who work in universities and colleges. There is a sense in which Prof. Henry calls for radical new beginnings. He says at the end of his discussion:

In an age when there is loss of understanding of causality in the professional disciplines of science and theology, and furthermore when there is the beginning sense of the loss of causality among ordinary men in a scientific culture and among ordinary believers, we need a healthy dose of ordinary common sense to offset these tendencies. For we all know that the *world* that science studies and the *world* in which religion has meaning is bound up, though not necessarily rigidly so, by cause and effect relationships. At least we know this to be so in our non-professional moments. We are apparently in an age when common sense can give general insights and a "touch of reality" that is not available through the professional disciplines of theology and science.

There is now, in short, a general loosening of the intellectual "binding observances" concerning knowledge itself, and an essentially moral reassertion of individual human identity and significance in the common-sense declaration that the human world is a world shaped by the causation of human beings. The gradual enlargement of the meaning of this declaration, and the introduction of rigor of the sort already amply illustrated by pioneering scientific writers such as Michael Polanyi and A. H. Maslow, provide clear indication that the Reformation is well launched and on its way.

REVIEW THERAPY BY DESIGN

ONCE in a while we get for review a book that hasn't quite made up its mind what sort of book it is or what it is trying to be, and turns out a far better work for such honest indecision. This seems about the only way to describe *Via 1*, *Ecology in Design*, apparently the first issue of a series of publications planned by the students of the Graduate School of Fine Arts in the University of Pennsylvania. At any rate, the reader is told that *Via 2* is to appear in May, 1969, and will be about "structure in a number of ways."

The indecisive element of this intellectually interesting and visually delighting volume (9" x 12", 136 pages, paperbound) is in whether it is about science or art. Naturally, it is concerned with both, being basically the work of people who wonder about what is involved in intelligent environment-making—hence the union of ecology with design. For ecology is the science which studies the processes and the significances of changes in environment, while design marshals factors of deliberation and choice concerning what should be done with or about the environment.

Ecologists—the best of them—often seem like men who have had systematic instruction in the engineering aspects of living things, yet who feel an almost irresistible impulse to write metaphysical poetry about the deeper implications of their field. Most of the time they resist this impulse; after all, they are professionally accountable as scientists. Yet some of them are surely Sunday visionaries, and Ecology in Design constitutes a concerted encouragement in this The reader soon realizes who the direction. founders and most eminent developers of this branch of science are and have been, and is bound to sympathize with the difficulties experienced by these devoted men in devising a proper definition of their undertaking. In today's practice, ecology seems to be mainly a salvage operation.

In this it may be something like psychoanalysis. Surely a healthy society would need no psychoanalysts. A really good society would be a naturally therapeutic community, with education and the arts performing as a matter of course the services which now seem to require specialists in mental and emotional disorder. Rollo May once pointed out that Greek drama was the psychotherapy of the Athenians, and one could say that the analyst's couch is a symptom of basic social inadequacy on the part of the general culture of the present.

So with ecology, at least in the aspect of its desperate salvage activity. When we learn to live like whole men, we shall not have to be continually told about all the bad things we are doing which mutilate the matrix of life around us. As John Phillips, a botanist who years ago established a school of ecology and conservation in South Africa, puts it in *Via 1*:

While a good deal of lip service is paid by biologists, planners, and landscape architects to the environment and its influence and to the concept of biotic communities, it is yet neither sufficiently widely nor clearly understood that the environment and these communities are still known only vaguely and in part, necessitating that investigations be continued for many generations so that the ecosystem may be better interpreted . . . Experience, gained from my service with the World Bank [as its consultant in agriculture and forestry] and other international organizations, and from various surveys and studies in a number of countries on the three tropical continents, has impressed upon me the frequency with which moderate to large propositions in development of various kinds have failed, because the concepts and objectives have been decided piecemeal and have not been ecologically, that is, holistically, oriented.

Another ecologist remarks: "Because of general disregard for non-market elements of the environment, we have damaged our habitat with abandon." Aldo Leopold, whose name is no stranger in these pages, was the first to point out that the "conservation" theories of men intent only on market-place values will *never* develop enough gumption to protect the planet from the

depredations of what people are willing to do to make a sale. Holistic thinking is the only reliable foundation for conservation.

Via 1 has several portfolios of photographs of such excellence that no owner of this book will ever allow it to be hidden away on a shelf.

There is this story told by Louis Kahn, architect and professor of architecture at the University of Pennsylvania, about Luis Barragan, Mexican architect and landscape architect:

Once we had breakfast in Mexico City. We talked about a commission he [Barragan] was just offered to design a religious place in the heart of a large city in Texas. He explained how happy it made him to be offered such a trust, but also how let down he was when he saw the site surrounded by uninspired buildings. "I cannot," he said, "find a beginning. I am afraid I must refuse." I reminded him of Independence Square which gained its significance from all structures around by simply being four feet above the level of the street and then asked, "If you were able to tear down the buildings on one side, revealing to the religious place a mountain range in the distance, would their silence inspire in you a beginning?"

The feeling in this anecdote is typical of the themes developed in *Via 1*. The poet, Howard Nemerov, is present with five poems, one of which, called "Learn by Doing," begins:

They're taking down a tree at the front door, The power saw is snarling at some nerves, Whining at others. Now and then it grunts, And sawdust falls like snow or a drift of seeds.

Rotten, they tell us, at the fork, and one
Big wind would bring it down. So what they do
They do, as usual, to do us good.
Whatever cannot carry its own weight
Has got to go, and so on; you expect
To hear them talking next about survival
And the values of a free society.
For in the explanations people give
On these occasions there is generally some
Mean-spirited moral point, and everyone
Privately wonders if his neighbors plan
To saw him up before he falls on them.

Of almost overwhelming beauty are photographs reprinted from Clive Bamford

Smith's *Builders in the Sun: Five Mexican Architects*, showing both untouched and built-upon scenes of a natural "rock garden" region, El Pedregal, near Mexico City, developed by Barragan and others into a residential area. Then there is this comment by Barragan on contemporary architecture:

Year by year, the height of ceilings diminishes and man, subconsciously, becomes more depressed. Mark you, I admire Le Corbusier's work tremendously, but the concept of building machines for living belittles the human being as well as detracting from, belittling, architecture. I fear that in our anthill structures, human personality is cribbed, confined, reduced to the lowest common denominator.

At the end of the volume is a text by the Dutch architect, Aldo van Eyck, striking the same high note:

There is no room for the imponderable, for the things that escape the limitations of the architect's (and planner's) ameliorative thinking—no place where it can nestle.

Instead of the inconvenience of filth and confusion, we have now got the boredom of hygiene. The material slum has gone—in Holland for example it has—but what has replaced it? Just mile upon mile of organized nowhere, and nobody feeling he is "somebody living somewhere." No microbes left—yet each citizen a disinfected pawn on the chessboard. No chessmen—hence no challenge, no duel and no dialogue.

The slum has gone—Behold the slum edging into the spirit.

A little later Aldo van Eyck asks a question which many people may have wondered about while considering the ardent longings and frustrations of the architect or city planner:

Can a city prevail as a city if those whose city it is (its citizens!) do not consciously participate in the actual (and continual) process of its formation? If society has no comprehensible form, what will become of its city-counterform? Can the city acquire a comprehensible form for people?

The discussion of this problem is provocative, reaching about the only conclusion it can: While

"people" may prevent the architect and the planning designer from doing many good things that they would like to do, they can, while contending with these limitations, still refuse when they are invited to hide behind the conventions of the meaningless and the mediocre:

Architects, see to it that the erroneous and feeble gets what it deserves—just this: NO!, for the constructive potential of this great word is still there for the service it can render.

We should not end this sketchy notice of the varied delights of Via 1 without adding that Aldo van Eyck, Fritz Morgenthaler, and Paul Parin contribute papers on the Soudanese Dogon-a people of Africa numbering about a quarter of a Together these discussions form a million. portrait of social and ecological harmony which reminds the reader of the excitements stirred by people like Ward Shepard, John Collier, and Laura Thompson when they first started writing for the general public about the Hopi Indians of the American Southwest. The photographs of the ingenious Dogon dwellings and the settings of their villages fill the last section of the book, lending support to such statements as that the Dogon "are among the greatest sculptors in the world." The material (pictures and text) on the Dogon occupies twenty-eight pages. Via is distributed by Grossman Publishers, 125A East 19th St., New York, N.Y. 10003.

COMMENTARY THE ETHICAL STANCE

IN the last section of *A Sand County Almanac* (Oxford University Press, 1949), Aldo Leopold speaks of what is closest to his heart—the idea of a Land Ethic. The obstacles to what he has in mind are numerous, many of them growing out of existing specialized approaches *to* nature. Technical training is almost always for use instead of understanding, and learning of this sort, Leopold shows, divides man from the earth. He writes:

In all these cleavages, we see repeated the same basic paradoxes: man the conqueror *versus* man the biotic citizen; science the sharpener of his sword *versus* science the searchlight on his universe; land the slave and servant *versus* land the collective organism. . . .

It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for the land, and a high regard for its value; I mean value in the philosophical sense.

Perhaps the most serious obstacle impeding the evolution of a land ethic is the fact that our educational and economic system is headed away from, rather than toward, an intense consciousness of the land. Your true modern is separated from the land by many middlemen, and by innumerable physical gadgets. He has no vital relationship to it; to him it is the space between cities on which crops grow. Turn him loose for a day on the land, and if the spot does not happen to be a golf links or a "scenic" area, he is bored stiff.

Very nearly all the conventional approaches to "reality"—business, science, recreation—obscure the vision on which the land ethic must be founded. Aldo Leopold, after a lifetime devoted to trying to give conservation a true foundation, might have given up hope had he not discerned a "minority which is in revolt against these 'modern' trends." He would, we are sure, have hailed *Ecology in Design* (see Review) as evidence of new muscle in that minority, since this publication speaks directly to the central problem as Leopold conceived it. He said:

The "key-log" which must be moved to release the evolutionary process for an ethic is simply this: quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity,, stability, and beauty of the biotic community. It is wrong when it tends otherwise.

Aldo Leopold was a tough-minded man. His account of how people ought to live on earth was the account given by a man who understood the principles of survival—survival of the human decencies and excellences which can flourish only in a setting of excellences serving all the world. This is a *law*, yet a law perceived only by those willing to stand where they can see and feel its operation. He states the law over and over again. This is one of its versions:

Science contributes moral as well as material blessings to the world. Its great moral contribution is objectivity, or the scientific point of view. This means doubting everything except facts; it means hewing to the facts, let the chips fall where they may. One of the facts hewn to by science is that every river needs more people, and all people need more inventions, and hence more science, the good life depends upon the indefinite extension of this chain of logic. That the good life on any river may likewise depend on the perception of its music, and the preservation of some music to perceive, is a form of doubt not yet entertained by science.

CHILDREN

... and Ourselves

BABIES AT WORK

A YEAR-OLD baby is not quite a baby any more, having become a dynamo of wild and free enterprise, making exciting discoveries in every direction and finding countless delights in what seems to adults a quite ordinary world. Is there a more enviable age in the whole of a human life?

Plenty of evidence is given by a one-year-old that someone inside is taking possession. The tissues and planes of his face, so recently a bit blobby, are becoming mirrors of alert intelligence and roving animation. If you didn't know about the rest of "growing up," it would be easy to think that a one-year-old had reached the climax of development, his life is so filled with his kind of competence in grasp and purpose. What transient Shangri-La, lost to adults, does he inhabit? Anyway, the last thing he needs is to be hurried along. Deep in the content of each moment, he has no eye on the future. The one-year-old lives his life inviolate, profoundly existential, and wonderfully serene. (Even his explosions of grief are whole and unambiguous.)

His command of meaningful sounds makes adult language seem hopelessly pedestrian. Who needs words used by other people when you can make a sound say all you want it to say? He obviously has no fear of not being understood. possibility arise. does not announcements made by a one-year-old are supremely confident declarations. The world knows what he means, even if curious parents are puzzled. Alas for the day when he will wander, quite innocently, into the labyrinth of language, and begin to put on the strait jacket of tense, mood, and voice! A lilt in the treble was far more communicative and could suffer no boring correction.

How much nicer it would be if one-year-olds were to teach us their manner of speaking instead of it having to be the other way around!

But if they must learn how to talk in order, as we say, to "cope" with the adult world and to do all the largely unnecessary things which drain the energies of grown-ups, they ought at least to be allowed to go their own pace, ad libbing our words into their world of discovery and wonder, instead of being turned too soon into beginning conformists. There are qualities belonging to childhood which should never be lost, and the chief problems of education will probably disappear when parents and teachers learn how to continue the wholeness of childhood throughout the "growing-up" cycle of the young, over which they now so disastrously preside.

A wonderful section called "Talk" in John Holt's *How Children Learn* is devoted to the way children start using their first words, and how they may feel about the business of naming things. Mr. Holt says:

... when we name an object, we put it in a class of things that are like it, at least in certain respects, and to all of which we give the same name. . . .

But babies, when they first look at the world, do not see it this way at all. For some time they see just a mass of shifting shapes and colors, a single, everchanging picture in front of them. The Museum of Modern Art in New York has a kind of action picture in which rotating, curved mirrors throw colored lights on a screen in continuously changing patterns. Some people find it disturbing to watch; they keep looking for some kind of system or regularity in the pattern, and cannot find any. The world must look something like this to a baby. The picture he sees before him is not made up, as it is for us, of many separate elements, each of which we can imagine and name, by itself, and all of which we can combine in our minds in other ways. When we see a chair in a room, we can easily imagine that chair in another part of the room, or by itself. But for the baby the chair is an integral part of the room he sees. This may be the reason, or one of the reasons, why, when we hide something from a very young baby, it ceases to exist for him. And this in turn may be one of the reasons why peek-a-boo games are such fun for small babies to play, and may contribute much to their growing understanding of the world.

Babies, in short, don't organize their experience the way we organize ours; they can't

do it that way and shouldn't be expected to. Mr. Holt recalls this comment on what is likely to happen a little later, when they start going to school:

Jerome Bruner once said, very aptly, that much of what we do and say in school only makes children feel that they do not know things that, in fact, they knew perfectly well before we began to talk to them. I have often seen this in mathematics, where fifth-graders, confused and frightened by rules and magic recipes, are unable to use either rules or common sense to do problems that they could easily have done a few years before. And what is true of school, is often true of home. A child's understanding of the world is uncertain and tentative. If we question him too much or too sharply, we are more likely to weaken that understanding than strengthen it. His understanding will grow faster if we can make ourselves have faith in it and leave it alone.

One good way to help children learn the names of things is by talking about anything we do together. Many mothers getting a child ready to go out, say something like this: "Now we'll tie up this shoe; pull the laces good and tight; now we'll get the boots; let's see, the right boot for the right foot, then the left boot for the left foot. . . ." This kind of talk is companionable and fun, and from it the child learns, not just words, but the kinds of phrases and sentences they fit into.

A main point in this section is that children don't really need most of the "corrections" we make of their mistakes. They are quite equal to correcting themselves, when the time or need for it comes. Mr. Holt quotes an old-time teacher:

"A word to the wise," he said slowly, "is *infuriating*." We all laughed, because he had fooled us, and because he was so right. We all know the kind of person who is quick to interrupt whatever we are saying to correct some unimportant mistake. Strangling seems much too good for him. I blush to think how long it took me to break myself of just that habit.

Wondering why *How Children Learn* is such a good book, we decided that the author sees no reason to bring children up to make all the mistakes their parents are making, which inevitably happens by teaching them to *imitate* adults without any good reason. Perceptive

teachers see what happens to children if they are spurred to adopt adult attitudes, when child attitudes are in so many ways more sensible, and especially for them. A kind of adult "modesty" is required of a good teacher. No one teaches a child by making up his mind for him. This isn't teaching, and anyhow we don't know enough.

FRONTIERS

The Gandhian Movement Today

IN MANAS for April 3, 1968, there was an account of the progress of the Gramdan Movement led by Vinoba Bhave in India. Begun in 1951 as the Bhoodan Movement—Bhoodan meaning "gift of land"—its name was changed in 1954 to Gramdan, signifying the gift of the village, since under the plan then inaugurated land for the landless farmers was given to the village itself, and allotted to those who needed it. The Gramdan land reform is a basic application of the Gandhian idea that all material possessions are held in trust. The movement is non-political, being carried on by voluntary workers who solicit land for the needs and health of the entire community. In the article for last April 3, it was reported that some fifty thousand villages, or approximately ten per cent of all the villages in India, had become Gramdan villages.

A substantial portion of this achievement was accomplished in the state of Bihar, where, starting in September, 1965, Vinoba went personally to launch the campaign. Vinoba's talks to the villagers over an initial three-months' period make the content of a small book by Suresh Ram, who accompanied the Gramdan leader on this pilgrimage. Titled Towards a Total Revolution, published the book is bv Sarvodaya Prachuralayam, in Thanjavar, Madras State, India, and is priced at one and a half rupees (about twenty cents, but double it for postage and handling). The importance of this book lies in its illustration of the spirit embodied by Vinoba in appealing to the Indian people to assist in those changes in land ownership which Gandhi regarded as essential to the free and peaceful India of the future. The publisher's foreword begins:

Seventeen years ago Vinobaji started his great mission for bringing about an economic revolution on the same lines on which Gandhiji led us to political freedom. Beginning with demands for gifts of land for the landless, Vinobaji appealed for abolishing the individual ownership of land through Gramdan.

With an almost prophetic vision, he declared as early as in 1957 that Gramdan was not only an economic programme but also a defense measure. No less than twelve lakhs [a lakh is 100,000] of acres of land have been distributed to the landless by voluntary effort, while the State legislatures all over the country do not promise more than ten lakhs. Vinobaji is not satisfied and with his hand on the pulse of the nation, he wants non-violence to function more speedily and effectively. He chose Bihar to establish the efficacy of the Gandhian method and urged upon its workers to launch a drive to wipe out the curse of landlessness from the State.

The program began on Sept. 11, 1965, in Patna, where Vinoba spoke to several groups of people. On the following day he sounded a keynote of his effort in a talk to members of various political parties in India. Party politics, he told this group, was fragmenting the unity of the people. He said:

We should think over whether there can be any means of reversing this process. Our parties have an eye, as it were, on the thermometer of external danger. If the temperature goes beyond the danger level they all become one and support the government. If the mercury goes below the mark they are not so serious for unity, and if it goes to a still lower mark they withdraw their unity entirely. I wonder whether we shall always require China and Pakistan to unite us, if nothing inside our own country can inspire us to the same unity.

I submit that Gramdan is a programme which would help you not only in fighting out the poverty of the country, but also in making your parties strong and united.

A few days later, in a Bihar town, Vinoba said of the then open conflict with Pakistan:

You eagerly listen to the radio news. Casualties and losses are taking place on both sides. Perhaps you feel glad when you hear that fifty people of India were killed as against one hundred of Pakistan. This is wrong. The truth is that one hundred and fifty people have gone. Hardly eighteen years ago we were one people. There are one crore [ten million] of Hindus in Pakistan and five crore Muslims in India. For hundreds of years we have been living together. There is therefore no question of anybody's gain or loss. Both will be hurt and suffer equally....

But what about the fate of the millions of our poor brethren? When a thousand crores are spent in defense every year the interests of the poor cannot be attended to. Planning has been going on for so many years. But it has widened the gulf between the poor and the rich, which is very dangerous. If the country is to grow and prosper, these disparities must go. Gramdan offers an effective way to remove them and make the villages happy and strong. I would, therefore, call upon you to offer your villages in Gramdan in large numbers and save the country at this critical hour.

In a talk in another town, the day following, he showed what he meant in more detail:

India has to face two challenges, that of communism in the form of China and of communalism [religious separatism] in the form of Pakistan. Socio-economic inequalities in the country encourage the former and our narrow behavior and sectarian outlook the latter. The way to face them is to establish Gramdan in the villages. . . . If thousands of villages join Gramdan and the Gram-Sabhas begin to function in the interests of the poor and the lowly, and treat them on an equal basis, it will change mutual relationships and wipe out poverty and the entire village will turn into a strong and solid community capable of throwing out any aggressor.

Day after day, Vinoba talked to the people of India in this fashion—as, indeed, he had been doing ever since 1951, when, in Kerala, he resolved to devote his energies to land reform, as India's greatest practical need. This compilation by Suresh Ram of three months of Vinoba's addresses to the townspeople and villagers of India, during 1965, gives basic insight into the moral power of the appeal of common ownership of the land for the common good, and helps the reader to grasp the processes of regeneration which are working, although slowly, and in the face of serious obstacles, throughout that ancient land.

Persons who find Gandhian literature inaccessible to them, except in the form of expensive volumes put out by American publishers, would do well to ask to be placed on the mailing list of Greenleaf Books, Canterbury,

New Hampshire. This is a service operated by Arthur Harvey, who makes the following explanation of its scope: "The purpose of this agency is to distribute the full range of Gandhi's writings, and books about him, which are not otherwise available in the West."

The Greenleaf catalog includes some twelve pages of single-spaced lists of books and pamphlets, in various categories. Since the publishers are chiefly Indian, prices are very low; in addition, volume orders earn substantial discounts—starting with ten per cent off, for example, on an order of \$30.00. An excellent selection of forty-two titles is available for \$17.50, called "Basic Library," which includes:

Twenty handbooks of Gandhian thought; Gandhi's Autobiography; Key to Health; Non-Violent Resistance; Basic Education; Satyagraha in South Africa; Christian Missions A Gandhian Rosary, Untouchability; My God, How to Serve the Cow; From Yeravda Mandir; Selected Letters; Fasting in Satyagraha; Democracy; Gandhi-Tagore Controversy; Theory and Practice of Civil Disobedience (Arthur Harvey), of Holy Disobedience (A. J. Muste); The Power of Non-Violence (Richard Gregg); A Righteous Struggle (M. Desai); Talking of Gandhi (Brown & Watson); Santiniketan Pilgrimage (Pyarelal); Handbook on Nonpayment of War Taxes (Peacemakers).

The smaller selection of twenty pamphlets, referred to as "Handbooks of Gandhian Thought," is available at \$3.00. All prices quoted are postpaid.