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THE CLOUD AND THE LIGHT

GREAT works of art have a secret that remains untold. They are recognized as great only because we know that the secret is there, not because it is told. Our language has a number of words which perform similar functions—words like "Freedom," "Love," and "Truth." Extended discussion of the meanings of these words comes to resemble the *via negativa* of mystical treatises or the "shaving process" described in one of the Upanishads. Exploration of these meanings leads to many graded classifications, each of which can be subdivided. Every definition calls for a qualification, and every qualification requires a footnote, and to this sort of scholarship there is no end.

It often seems that history is made—or ruthlessly botched—only by men who declare that they *know* what words like freedom and truth mean. All the recent revolutions, at any rate, bear the imprint of such claims. Critical historical studies are filled with descriptions of the means used by the managers of successful revolutions to establish themselves as authorities concerning not only the meaning of freedom but also on what is acceptable as art and the legitimate practice of scientific research. In short, they make themselves ridiculous in the eyes of men living in other parts of the world, where, for the time, the reigning conformities are either different or less objectively demanding.

A conclusion from this course of history might be that the only way to save the values of freedom and truth from extreme perversion is to prohibit their final definition. We can afford loose, limited, unpretentious, *working* definitions of these values, but no ultimate disclosures on which systems of control can logically be based. Whenever people are allowed to claim that they *really* know, they establish Holy Inquisitions and NKVD's. Knowing the truth gives title to power, they say.

So there are practical as well as philosophic reasons for restraint in assertions about "the truth." Socrates, one of the great exemplars in the practice of philosophy, adopted this position in explaining why the Delphic Oracle selected him as the wisest man in all Athens. It was because he claimed to know nothing at all. And the makers of the Constitution of the United States, determined to avoid the terrible abuses which result when "official" truth is armed with political power, specifically denied Congress the right to make laws respecting the establishment of Religion. They did this, we may suppose, out of a pragmatic wisdom. Yet the tenth is a poorly enforced amendment. Further, the passion for authority is a slippery, protean emotion. Deny it the garb of religious sanction, and it may find an equally impressive costume. We've *got* to have sufficient arbitrary power, men say, to control the behavior of irrational people.

It seems reasonable to say that all the real troubles and most of the nonsense in the world come from insistence on this claim. Both the religious and the ideological wars of history can be traced to it—and these are the worst of all wars, since, being for "truth," they can be pursued without attention to ordinary reason or humane considerations. Both the sincere and the propaganda claims of ideological systems have a similar source. The frenzied "progress" of the technological society is largely owing to the white, gray, and eventually red and black lies of the advertising business concerning the brands of certainty (the savors of the Good Life) that can be bought for money. The elementary fact about all these sought-after and purchasable forms of satisfaction—that their end-result is always a more demanding appetite—has been known to wise

men since the beginning of time, but how can the powerless wise compete with established authority? Religious freedom? We all believe in it. Have some religion next Sunday—all flavors are good for you. It's even in the budget. We give a little each year.

Two conclusions are possible. One is that the wrong men are in power, which gives you a program immediately: You have to put the right men in power—the men who know the real truth. The other conclusion is that no man who knows any important truth will ever want or accept power—in fact, that is the only way to identify wise men, but it also brings in a lot of people who may be simply lazy, incompetent, or irresponsible.

A practical man might argue: "Well, even if there's some factual basis for your second conclusion, what can you *do* with a fact like that, besides undermine the public faith? We have all these good things going for the people, and you want to tell them that we don't really know what we are talking about. What would you suggest?"

No answer to this question can be really convincing, but some answers might be more acceptable than others. One of these could begin by going back to Lao-tse's form of the Socratic warning about "certainty": "The Tao that can be named is not the Eternal Tao." This, when its implications are developed, proposes that a man can cope wisely with existence only by learning to live two lives in one. One of his lives is given to continual private effort to embody the Tao that cannot be named; this effort is important because of its effect on his other life—the life that is obliged to adjust to the way the people of his time name the Tao (declare their certainties) and experience the consequences. This is almost like saying that some orders of illusion are more deceptive than others, or that some versions of "certainty" are less misleading than others. How do you tell one from the other? By consulting the Tao that cannot be named!

Something like the practice of this injunction is surely the origin of the great symbolic accounts of the meaning of human life that have come down to us from ancient religions. Symbolism retains hints of unnamable reality in the complex of ideas which men use in place of the truth that cannot be talked about. A symbol, that is, always leaves something out; it doesn't tell all. If you press a symbol for final certainty, it will collapse into a dead letter. Symbolic meanings, then, are as fragile as the delicate growing tips of plants. Awe and wonder attend their emergence; to deduce absolute rules of law and order from them would be as silly as expecting a computer to write a poem that will displace the role in literature of a Shelley or a Blake.

Yet the fact is that we don't do very well without systems of government. We have to have them, but it sometimes seems as though lawmaking is the most thankless task in history. If too much faith is placed in the inventions of legislatures, the result is the spread of cultural attitudes which ignore and shut out awareness of the realities which cannot be named. Yet if law is not respected, the evils of disorder make normal life impossible. An ideal system of law, you might say, would be the reflection of an accurate reading of the best social behavior of which a people are capable at a given time. What incredible guesswork must be involved in lawmaking, for all but the very wise! Numa's approach, as described in *Plutarch's Lives,* is probably as good as any, but how many legislators are as wise as Numa, and how often does a Numa get a free hand?

Lao-tse, whom we have so far adopted for our counselor, spent his life giving advice to rulers, and when he was an old man, according to the legend, he finally got discouraged and went away, stopping briefly at China's Western frontier to write out the *Tao Te Ching.* In this book, among other things, he recorded his depression:

> Alas! the barrenness of the age has not reached its limit.
>
> All men are radiant with happiness, as if enjoying a great feast, as if mounted on a tower in spring. I alone am still, and give as yet no sign of

> joy. I am like an infant which has not yet smiled, forlorn as one who has nowhere to lay his head. Other men have plenty, while I alone seem to have lost all. I am a man foolish in heart, dull and confused. Other men are full of light; I alone seem to be in darkness. Other men are alert; I alone am listless. I am unsettled as the ocean, drifting as though I had no stopping-place. All men have their usefulness; I alone am stupid and clownish. Lonely though I am and unlike other men, yet I revere the Foster-Mother, Tao.
>
> My words are very easy to understand, very easy to put into practice; yet the world can neither understand nor practice them.
>
> My words have a clue, my actions have an underlying principle. It is because men do not know the clue that they understand me not.
>
> Those who know me are few, and on that account my honour is the greater.
>
> Thus the Sage wears coarse garments, but carries a jewel in his bosom.

Probably he was tired, and, you could say, entitled. Conceivably, Lao-tse's lament is similar to what any man who tries to live two lives at once will feel like saying to himself, once in a while. Following Socrates, he will confess to knowing nothing at all. The thought occurs of how pleasant it would be to have a government like that, similarly afflicted with modesty, with officials equally open about their uncertainties, if we could get it. MANAS once had an article along these lines, called "The Apologetic State" (Feb. 3, 1965). It described a system based on Socratic Ignorance, under which nobody pretended to have the final word—neither the truth about freedom nor a sure way to administer justice. One effect of this system was that people found they could trust the officials. All the bureaucrats wore coarse garments, but they didn't hide any jewel under them and they admitted it.

Actually, there is reason to think that such proposals may begin to get a hearing, growing out of the fact that Lao-tse is read more and more, these days, while Socrates, too, is enjoying a good press. The two-lives-in-one idea may not seem so impracticable, as time goes on. There is a sense in which many people are beginning to suspect that Lao-tse and Socrates knew something important—that their secret, even if untold, is *real.*

Has, then, whatever truth is known to men like them a special language? Is there a kind of communication that makes an impact reaching beyond words? There must be. For example, if a man is vouchsafed a great vision, he doesn't, if he has any sense, just write a "report." He knows he must generate the vision anew—create a work of his own that is capable of giving off an independent light. He has to cry out to the world. He must spin a new web of symbolism, a wonderfully controlled play of illusions which can also serve as a path to fresh understanding.

What, after all, is our "cultural inheritance" but the sum of such fields of vision brought forward from the past, including what lesser men have done with or to them? Even our science is this; as Eddington said:

> We have found a strange footprint on the shores of the unknown. We have devised profound theories, one after the other, to account for its origin. At last, we have succeeded in reconstructing the creature that made the footprint. And lo! it is our own.

When this self-created aspect of the world around us begins to be generally apparent, the Lao-tses and Socrateses will begin to have a less lonely time. For full recognition of the potency of acts of the imagination brings men out on the other side of the web of illusion, making them ready and willing for the two-lives-in-one sort of existence. And then history can be written simply as the record of how men in nations and races have named the Tao and then undertaken action to prove themselves right.

Over each age hangs a great cloud of conventional belief which is continually being added to and subtracted from. Is there a substance and order of truth about things to be seen from *outside* the cloud? Could the cloud itself be dispelled by making a lens of its lesser mists? Knowing this, we could explain what Plato

meant by "sunlight" in his allegory of the Cave. We could ourselves compose works luminous with the two-poled, dissolving light of paradox—works like the *Tao Te Ching*—and not simply puzzle over them. For then we would know the secret of the reciprocal relations between the finite and the infinite—of how the instantaneous inhabits the timeless All. But these matters, we suspect, are not literary but existential exercises. They are the acts of being, the resolutions of life. There are no records of such things, only strange side-effects of nonexistent revelations, only faint echoes of what has never been and never will be voiced. This archaic yet never closing drama is consciously played out from time to time, with new settings and vernacular, whenever men feel the stir of wonder and the spur of longing to know the self-being from both without and within. So are renewed the ancient quests which give phrases like "twice-born" their meaning and fuel the distant glimmer of the Holy Grail.

What then are the ratios governing the reflected images of the self? They are, it seems, both the active and the passive reaches of the human mind, and collectively the key to all historical change. The great reformer, the legislator and the constitution-maker must be the sort of man who, sensing the dominant ratios of an epoch, somehow comprehends their complex naming of the Tao. Or, by a sure instinct, he reads the symbolic meanings of that time for insight into the order of experience that will be most fruitful for general human development. The Constitution of the United States, for example, is modelled on a conception of the nature of man which was an advance over previous conceptions in Western history. That no man is derivative or subordinate in essence, was the vision of that age, and from it grew a great new scheme of social order. No man is dependent for his being, rights, and responsibilities on any other man, class or group. By thinking of themselves in this way, men could become the rulers of their own lives, could choose their own ends.

Today we are weary of dead-letter symbols and disenchanted by political failure. Yet there is a sense in which modern man has chosen his own ends, and knows it, although he is increasingly horrified by how they are turning out. What then is a man? Apparently, he is a form of intelligence capable at once of both self-knowledge and self-delusion. He is the being for whom the structure of illusion is also the ladder of ascent. There is indeed a mystery of creation. What sort of envisioning wears away the barriers of dreams not yet dreamed?

Letter from ISRAEL

I RECENTLY spent a week-end in a kibbutz. Since this is by no means a unique experience, a report might not be justified were it not that sampling another style of life may shed an unsuspected light on one's own.

One of the first surprises was the total lack of recognition or greetings among kibbutz members as they go about the area. In more than an hour of walking with my host on what he described as the "grand tour," in several meals in the dining hall, in two hours in and about the swimming pool, I observed no casual greetings and was introduced to exactly one person. In the family it was different: each child and each child's friends were introduced as they came in at the afternoon family-hour.

My explanation is no great discovery, but may offer instructive contrasts. In the kibbutz setting, where 600 people live in intense domestic proximity within 20 acres, relationships are all-important at certain selected levels. Mutual understanding, pooling of effort and resources, democratic management of work and social life through the weekly kibbutz meeting of 300 members and the ubiquitous functional committees—these are the essential relationships. That being so, the quality cherished is what Kahlil Gibran would call "spaces in . . . togetherness." I had the feeling, as people passed on the walks, that these essential spaces are maintained by almost not seeing each other in nonessential relationships. My own untutored anticipation of the kibbutz situation had included a horror of close-living density. Now I am less sure.

In contrast, consider Swiss habits, with which I am more familiar. There is deliberate personal isolation about the Swiss, a formality in relationships that sometimes puzzles the less formal and dignified Americans. The Swiss matron dresses in her best to go shopping, in contrast with the sloppy habit of the American housewife in her hair-curlers. In public the Swiss are given to what seems exaggerated greeting and hand-shaking on all occasions. Does this public recognition offset the cherished personal privacy of the Swiss, a formal togetherness to complement the spaces felt to be essential?

There is the probably pointless question: Is one of these styles the more healthy and constructive? Each, no doubt, is a long-term response to the conditions met in daily life.

One night I attended the graduation exercises of the kibbutz secondary school. It was a big event, beginning at 9:30 in the community dining hall-auditorium. The informal stage juts into the room at one side, its clumsy appearance in sharp contrast with the sophisticated lighting and microphone systems. The entire proceedings were written, produced and acted by the graduating class of 29, with the exception of an opening speech—if that is the word—of perhaps two minutes by a member of the kibbutz secretariat. The gist of the introduction, as translated to me, was: "Look! You're graduating today. Tomorrow you're all going into the Army. Day after tomorrow we hope you will be coming back to us. We'll be here—waiting for you." It was as emotionless as a train-call. Even the applause was restrained.

What followed was a sort of variety show whose theme was the problem of communications. To cure faults in this area, everyone was imagined as equipped with a telephone handset, and apparently the conversations which ensued at a rapid pace for an hour were both apt and funny, although the laughter was by turns hilarious and rueful. The young were reported to be dissatisfied with their production, the elders wholly delighted. A party followed, which I did not attend, for graduates and their parents only, and until 1:00 a.m. the buildings shook with the pleasure of it.

Perhaps I am being perverse to contrast this with the Commencement services, earlier the same week, in an Arab town, celebrating the graduation of Arab boys and girls from the schools run for a

great many years in the community by a foreign church organization. Proceedings were as solemnly traditional and stereotyped there as they were uninhibited and original at the kibbutz. Girls, dressed to the teeth, entered down the chapel's center aisle at a solemn processional pace. There followed in ritual order the Welcome, the Prayer, the religious Solo by a fluty soprano, two Valedictory Orations, the Senior Citizen's speech, the Diplomas, the Awards, then the Recessional. The affair was decently simple, dignified, and it had qualities of sincerity, but it was as unoriginal as it was joyless. It also showed qualities of a split personality, since insofar as possible item succeeded item alternately in Arabic and in English.

It is clear that the kibbutz has turned out a class of vital young people, who are going off forthwith to undertake their first duty to their society, unfortunate as that first duty may seem to us to be. Nothing so clear and definite is discernible about the Arab graduates. There is a difference between these two societies. One wonders about its portents and the remoteness of our understanding of such matters

ROVING CORRESPONDENT

REVIEW
AGAINST MADNESS AND ABSURDITY

FEW if any of the contemporary accounts of the arena or battlefield of modern life are as clarifying as that provided by Theodore Roszak in *The Making of a Counter Culture* (Doubleday, hardbound, $7.95; Anchor, $1.95). It goes further than previous books in the conclusiveness of its diagnosis and in the coherence of its criticism of the structure, mechanisms, and compulsive necessities of the technological society. It shows the complexity of the rejecting reaction of the young, wasting little space on surface aspects. Finally, it traces the distempers of the times to the cultural and psychological myopia of the "scientific" outlook and looks behind the irrational desperations of the present for the rudiments of a new beginning—a "counter culture."

The author's open uncertainty where uncertainty is called for—there is nothing resembling expertise in his work—has the effect of inviting the confidence of the reader. The book may be taken to illustrate what a humane and intelligent man—any humane intelligent man—might do about understanding his times, if he puts his mind to it. This may be exactly what is needed by a society made deeply ill by the manipulations of experts. The root-trouble, that is, may be more in the way in which we think of ourselves in relation to the world, than in all those "problems" out there. Early in the book Mr. Roszak asks a key question:

> What is it that has allowed so many of our men of science, our scholars, our most sophisticated leaders, even our boldest would-be revolutionary leaders to make their peace with technocracy—or indeed to enter its service so cheerfully? Not lack of intellect or ignorance of humane values. It is rather the technocratic assumptions about the nature of man, society, and nature have warped our experience at the source, and so have become buried premises from which intellect and ethical judgment proceed.
>
> In order, then, to root out those distortive assumptions nothing less is required than the subversion of the scientific world view, with its entrenched commitment to an egocentric and cerebral mode of consciousness. In its place, there must be a new culture in which the non-intellective capacities of the personality—those capacities that take fire from visionary splendor and the experience of human communion—become arbiters of the good, the true, and the beautiful.

What are the hazards of such a program, and its possible costs? Much of the book is devoted to the implications of this question. The second chapter, "An Invasion of Centaurs," likens the rebellion of sensitive and intelligent youth to the dionysiac intrusion of the centaurs upon the serene devotions of an Apollonian order. Apollo could make the centaurs behave, but we have no such godlike authority over youth. Not any more. While the author of this book has more respect for the forces of upheaval than for the blindly resisting *status quo*, "respect," in this case, generates critical examination. His feeling for the purely emotional aspect of the revolt of the young might be compared with William Blake's qualified sympathy for the unleashed "desire" of the revolutionary impulse—nothing good will happen without it, yet with only this wild energy for guide the rebels will soon construct other confinements of the spirit. While the commercial press directs attention almost entirely to the excesses of the alienated young, Mr. Roszak explores the positive and long-denied yearnings which lie behind them. For example, he finds in the early expressions of the student left clues to a genuine social vision. If these promising auguries have been covered over in recent years—for who, under the terrible urgencies of the war in Vietnam and the continuing crises in the cities, can make do with "clues"?—it is nonetheless a mistake to ignore those original holistic longings. Short-circuits can sometimes be corrected when you see where they occurred. So also with the frothy simplifications of Eastern mysticism that seem not only ridiculous to tough-minded observers, but vulgarly profaning to genuine devotees of wisdom of the East. We can say "how awful," and perhaps should, but what was the dream, however immature, of goodness and truth that a generation betrayed by

non-education could think might be fulfilled in such muddied "mystical" shallows? The turn in some other direction was inevitable, and if, having made the turn, the young embraced weird new confusions, that is no reason to deny the moral necessity of the turn. Mr. Roszak hails the turn and tries to understand the new confusion:

> What was it that Zen offered or seemed to offer to the young? It is difficult to avoid feeling that the great advantage that Zen possesses (if it can be called an advantage) is its unusual vulnerability to what I have called "adolescentization." That is to say: Zen, vulgarized, dovetails remarkably with a number of adolescent traits. Its commitment to a wise silence which contrasts so strongly with the preachiness of Christianity, can easily ally with the moody inarticulateness of youth. Why do Zen masters throw their disciples into a mud puddle? asks Kerouac's Sal Paradise in *The Dharma Bums.* "That's because they want them to realize mud is better than words." A generation that had come to admire the tongue-tied incoherence of James Dean and which has been willing to believe that the medium is the message, would obviously welcome a tradition that regarded talking as beside the point. Similarly, Zen's commitment to paradox and randomness could be conveniently identified with the intellectual confusion of healthily restless, but still unformed minds. Perhaps above all, Zen's antinomianism could serve as a sanction for the adolescent need of freedom, especially for those who possessed a justified discomfort with the competitive exactions and conformities of the technocracy.

There are chapters on the social theories of Herbert Marcuse and Norman O. Brown, on the counterfeits of inner reality produced by drugs, and on the influence of Allen Ginsberg, Timothy Leary, and Allan Watts. One chapter shows that, except for Paul Goodman, the insistent question of how to live one's life has no acceptable answer at all from the adult society. Goodman's communitarian ideas, variously expressed, are called his "greatest and most directly appreciated contribution to contemporary youth culture." Goodman's counsel, already widely followed, is put in these words:

> So how *do* you grow up? Where is the life-sustaining receptacle that can nourish and protect good citizenship?
>
> The answer is: you make up a community of those you love and respect, where there can be enduring friendships, children, and, by mutual aid, three meals a day scraped together by honorable and enjoyable labor. Nobody knows quite how it is to be done. There are not many reliable models. The old radicals are no help; they talked about socializing whole economies, or launching third parties, or strengthening the unions, but not about building communities.

The last two chapters may in the long run be the most important. They deal with the all-pervasive and largely unexamined assumptions of the doctrine of "objective" knowledge, the psycho-social and moral effects of these assumptions, and the possibility of alternative conceptions of knowledge or "truth." Actually, the placing of what we speak of as scientific knowledge within a larger epistemological scheme is the task which these chapters prepare for. The first steps, which are negative, have already been accomplished by the positivists. Further steps were taken in the theoretical ideas of such men as Eddington and Whitehead, and by the rapid maturation of scientific thinking generally, as illustrated by Willis Harman's recent observation that "science is not a description of 'reality' but a metaphorical ordering of experience." The fatal mistake made by the popularizers of the scientific outlook lay in the assumption that science would make final, unambiguous rulings about everything that can be known. In time this claim became the central dogma of the faith of the age. There is bitter irony in the fact that during the very years in which the pioneers of the new physics and the new psychology were rediscovering the crucial importance of the human subject in all scientific determinations, the popularizers were converting the multitude to vulgar scientific absolutism and the cult of objective fact. The great persuader in this process has been that science *works:*

> For most of us the jargon and mathematical elaborations of the experts are so much mumbo

> jumbo. But, we feel certain, it is all mumbo jumbo that *works*—or at least seems to work after some fashion that the same experts tell us should be satisfactory. If those who know best tell us that progress consists in computerizing the making of political and military decisions, who are we to say that this is not the best way to run our politics? If enough experts told us that strontium 90 and smog were good for us, doubtless most of us would take their word for it. We push a button and something called the engine starts; we press a pedal and the vehicle moves; we press the pedal more and it moves faster. If we believe there is someplace to get and if we believe it is important to get there very, very fast—despite the smog—then the automobile is an impressive piece of magic.

An automobile is more than a "metaphor." Well, *isn't it*? Well, yes. It is also less than a metaphor. There are other magics, other wonders which demand more of us as men, and in demanding more, exact less. The magic of a great mind requires us to stand and peer beyond to new horizons; while the machine—the machine gives us a book of rules. The visions of great poets and mystics speak truly in metaphor; their magic acts on another plane; and the order of their insight, while it would not discard science, would certainly value its wonders by a very different scale.

What sort of men shall we become? Only answers to this question will illuminate the decisions which lie ahead, and our obsessive preoccupation with scientific objectivity has shut this question out of our lives. To ask it, today, is almost a clandestine activity. It comes to most men only obliquely, because the provocation is desperation or pain. Surely the longing for a vision of human becoming lies behind even the wildest and most extravagant expedients of the youth of today, and in their getting together in groups and encouraging one another, there may be the makings of the conquest of fear, which is the worst confinement of inspiration. In his last chapter, Mr. Roszak writes of a "magic" which promises no "mass" solutions, yet has always been a presence in the world, and is no weak or flimsy thing:

> I, who do not share any of Tolstoy's religion or that of the prophets of Israel, and who do not believe that a single jot of Dante's or Blake's world view is "true" in any scientific sense, nevertheless realize that any carping I might do about the correctness of their convictions would be preposterously petty. Their words are a conduit of power that one longs to share. One reads their words with only humility and remorse for having lived on a lesser scale than they, for having at any point foregone the opportunity to achieve the dimensions of their vision. . . . Were we prepared to accept the beauty of the fully illuminated personality as our standard of truth—or (if the word "truth" is too sacrosanctly the property of science) of ultimate meaningfulness—then we should have done with this idiocy of making fractional evaluations of men and of ourselves.

There are endless ways to make discoveries and to say things of this sort. The need is not to choose any one way, but to make a contagion out of doing it. It should become easier after a while.

COMMENTARY
HOW KNOWLEDGE IS ACQUIRED

CRITICISM of high confidence in "objective knowledge" is not limited to humanists of Theodore Roszak's persuasion (see Review). Two years ago, Ralph Slovenko, professor of law at the University of Kansas, contributed to *Etc.* (September, 1967) a learned article on the time-honored "opinion rule" governing legal testimony, the rule being that witnesses may testify as to "facts," but that "opinion" is not acceptable. The point of Prof. Slovenko's article is that every fact is in some sense a construct of opinion, and while testimony should be restricted to statements which are not careless or fanciful, statements of opinion are unavoidable. Prof. Slovenko gives the view of the American Law Institute:

> The opinion rule should be used to facilitate procedure and to reach a fair result, and to this end it should be applied flexibly. It should neither be related to an inadequate epistemology, which may tend to invest it with a sense of inviolability, nor be expressed in such a manner as to force its users to accept, at least implicitly, an inadequate epistemology or an ontology of discrete fact. . . .
>
> "Hard facts" upon examination turn out to be false. Every statement resolves itself into a matter of opinion. The contention that opinion is inference and that fact is original perception cannot be sustained, since the process of knowledge is the same for both. There is no statement, however specific and detailed, that is not in some measure the product of inference and reflection as well as observation and memory. A human being cannot behave as a mere "dataphone." It is impossible to confine witnesses to some fancied realm of "fact" and forbid them to enter the domain of "opinion."

Both physical scientists and perceptual psychologists would agree essentially with what Prof. Slovenko says about the way our "knowledge" is acquired:

> In knowledge we are "selecting" and "grouping" some small scraps of the vast mass of influences that surround us, being driven on to do so by our emotions, feelings, impulses, and interests. . . . on the whole we tend to "select" and "group" in ways which fall between two extremes, on the one hand the most simple and coherent, and on the other the most comfortable. Just how far they fall toward the one extreme or towards the other depends on what sort of persons we are and on what sort of persons we wish to be.

The scientists of tomorrow will be fully aware of these factors, and doubtless some others, and make the best of them. And they will then have nothing to say about purely "objective facts," which do not exist, and never have.

CHILDREN
. . . and Ourselves
ECOLOGY FOR THE YOUNG

WHENEVER a new tool for teaching becomes available, using it with enthusiasm is a natural response, and probably no teaching approach to the world around us has been more eagerly embraced than the family of ideas known under the heading of Ecology. The ecological approach is both critical and restorative; while having scientific rigor, it does not reject the language of wonder and mystery. It schools in holistic thinking and is grained with the ethics of a natural pantheism. Through the example of its pioneer champions and practitioners, ecology fosters the human inclination to philosophical thinking and encourages spontaneous feelings of sympathy and delight which have for so long been outlawed by the tough-minded, desacralizing habits of "laboratory science."

Ecology, you could say, is "nature study" grown up. In *A Place in the San* (William Morrow, 1968), the authors, Lois and Louis Darling, who live on an old farm in Connecticut, start out with the most fundamental of all living processes—photosynthesis, the making of sugar and the release of oxygen to the air by the chlorophyl or chloroplasts in plants. A number of simple life-cycles are then shown by diagram, illustrating the dependence of all life on earth on the green plants. It is a vast reciprocity:

> In a manner of speaking, living things merely borrow the materials from which their bodies are formed as they use the energy this material contains. Life is not really a thing. It is a series of energy-using events. During it the materials of life circulate endlessly from the non-living world into the living, and back to the non-living again. Theoretically they are inexhaustible.

The authors explain that the diagrams of life-cycles—showing vital energy passing from plant tissue consumed by insects to small animals which eat the insects, to larger animals which eat the small ones, and its return to plant-nourishing earth by decomposition of wastes and the death of all the living things—are simplified "models" of much more complicated processes, many aspects of which cannot possibly be explained. A model is instructive because it leaves so much out.

This seems excellent preparation for what the young may be fortunate enough to learn, a little later on, concerning the entire body of scientific knowledge. Scientific theories are based on models which abstract from the workings of nature in special ways—ways that often make natural resources and power available to us. They are not "the truth" about nature and life. Lois and Louis Darling, having quoted from a contemporary ecologist—"Nature is not more complicated than we think—it is more complicated than we *can* think"—show how simplified ecosystem models illustrate the interdependence throughout nature, then speak of how some models are devised:

> Models are "built" from symbols and from analogies, or comparisons of the unfamiliar with the familiar. Analogies are very useful and may be the major way in which we can understand such things as the eco-system concept. But they must be used with great caution. Many analogies and the models resulting from their use can be very misleading unless one constantly keeps in mind that they are just what they are called models. An analogy that has been much used in the past, especially in popular ecology books and posters, represents green plants as "food factories." Sometimes pictures of this model go to the length of showing it complete with gears, cogwheels, and all the other symbols of human-made machinery.
>
> This misleading use of mechanical analogies is typical of many very poor models. A green plant is not like a factory even in a vague sense of the word. A plant is a living organism, a product of many millions of years of evolution. It can build, repair, and reproduce itself. It has not been designed by, is not run or directed by, and does not exist *for* any other living thing. To compare it to human machinery and give it a human reason and purpose for being, is erroneous and can only lead to a basic misunderstanding. . . .
>
> It must never be forgotten for a moment that the neatly lettered ecological diagrams with their pointing arrows are really only pictures of human-

> conceived models that try to explain something of the processes that take place in waving leaves and grasses and in gemlike algae in golden sunlight, and all the activity of life that follows this miracle of the green plant.

Why are such books written today? Quite evidently, because the authors believe that human beings must learn how to enter into more harmonious and intelligent relations with Nature. This feeling and hope enters into practically everything that you read on ecology, nowadays. The unspoken message of the diagrams follows an unprinted arrow which points to reverence for life. Or it says, repeating Aldo Leopold, that people need to *love* the land and to honor every form of existence upon it, preserving and cherishing a place for all.

There are other ways of thinking about human relationships with the land, based upon another kind of awareness. In *Freedom and Culture,* Dorothy Lee quotes the lament of a California (Wintu) Indian woman:

> The white people never cared for the land or deer or bear. When we Indians kill meat, we eat it all up. When we dig roots, we make little holes. . . . We shake down acorns and pinenuts. We don't chop down the trees. We only use dead wood. But the white people plow up the ground, pull up the trees, kill everything. The tree says, "Don't. I am sore. Don't hurt me." But they chop it down and cut it up. The spirit of the land hates them. . . . The Indians never hurt anything, but the white people destroy all. They blast rocks and scatter them on the ground. The rock says "Don't! You are hurting me." But the white people pay no attention. When the Indians use rocks, they take little round ones for their cooking. . . . How can the spirit of the earth like the white man? . . . Everywhere the white man has touched it, it is sore.

This is another sort of model of man in nature, as part of a sensible whole. Can the earth indeed speak? Is there any consciousness in man that might feel as the earth feels? The Indian woman's utterance seems to contain truths which our models—even our best ecological models—leave out. There is, after all a great difference between seeing and *feeling* what is right and good.

Perhaps we cannot borrow Indian models, but need to learn to "feel" in our own way. Yet our minds might be opened, and some of our rind of unfeeling shed, by contemplating them. Meanwhile, the closing paragraph of *A Place in the Sun* has an appeal all can understand:

> Our age-old attitude about who and what we are and our place in the world of life is being shaken by events. We now see that our attempt to "conquer" nature with arrogant but bumbling greediness can only result in disaster for all mankind. As we modify nature it is increasingly apparent that we must also modify our own behavior to fit the facts of our existence in the great biosphere. To accomplish this end we need to do much more to understand ourselves—not only to keep from blowing each other and all that we hold dear to radioactive bits or breeding ourselves off the face of Earth, but to develop a sense of morality, or an ethic, toward all of nature and our place in it, as well as toward our fellow man. Only then will we be able to use our tremendous power for the good of the whole that is nature. Only then will our magnificent quest for knowledge fulfill the promise that it has for the future.

FRONTIERS

Attitudes of Nonviolent Resisters

IN a number of instances during the struggles for civil rights or for educational reform the proponents of such changes confronted their opponents with what they intended to be nonviolent resistance. But either they misconceived the nature of nonviolence or lost their self-control. They did not strike their opponents or brandish sticks, stones or glass bottles, but they taunted or jeered their opponents or the police, or shouted disrespectful names at them. Such conduct is not truly nonviolent. Violence is not merely physical action. Violence and nonviolence are also matters of inner attitude. Sarcasm or a look in the eye can hurt or arouse resentment as much as a slap.

Nonviolence is not just a clever political gimmick. It operates at a deeper level than politics. It may have political results but its psychological action is at a deeper level. It is a search for truth.

"But," you may exclaim, "are you asking everybody who takes part in a nonviolent demonstration for civil rights to have no emotions or be a saint?" No; but if they want to win, they must understand more about human nature and its potentialities than their violent opponents do. They must be wiser than their opponents and have deeper discipline. There is one big thing the believers in nonviolence must believe in and practice, and that is the unity of all mankind.

The differences between people are easy to see, but the similarities and unities are not examined so carefully, and so need to be made explicit in detail. These similarities and unities are older, deeper, wider, stronger, more enduring, and more important than the differences between human beings.

Biologically speaking, man is a single species. A man of any race, rank, nation, culture, caste, religion, intelligence, education, or economic status, may marry a woman who is different from him in any or all of these respects and yet they can have a baby who will be a human being. Secondly, there is a physiological unity between all people, no matter what other differences there may be between them. All men have similar senses, similar organs of breathing, blood circulation, digestion, hormone systems, nerves and brains, and all these physiological organs and systems operate in the same manner. If an Eskimo gets an inflamed appendix, the surgeon operates on him just the same as he would on a Chinese in the same situation or a Congolese or a European. Thirdly, all races of men have the same blood types though in different proportions, so that blood of a specific type can be successfully transfused from a person of one race to a person of a different race with the same blood type. All people, regardless of superficial differences, have the same set of emotions—love, anger, fear, hope, respect, suspicion, and so forth. These emotions may be called forth by different sights, sounds, events or actions in different groups, but all people without exception have the same set of emotions. All normal people have memories and powers of comparison. These two functions operate in specific adjacent areas in the frontal lobe of the brain. All normal people have minds and use them in the differing problems of their respective environments. Their concepts, the contents of their minds, may be different, but thinking as a method of solving their problems is common to them all. The great majority of scientists, after careful and prolonged investigation, have decided that there are no inherent differences in the mental equipment and potentialities of the different races.

Again, the young of all human beings, no matter what special group they belong to, have a much longer period of relative helplessness and maturing in relation to their total life-span than the young of any other animal species. This is what gives man his enormous capacity and power of learning and adaptation. Finally, all people have some sort of language by means of which they

cooperate and find a meaning in life. No matter what differences there may be between them, all people have some sort of culture, some sort of tools, some sort of dress; they all have some sort of symbols other than language, believe in some sort of myths, and base their lives on some sort of assumptions. Religious people would add to the above mentioned unities and underlying spiritual unity, and I would agree.

Among the memories found in the minds of all people except those who lost their mothers when they were very young, is a memory of mother love and the experience of playing with other children free from prejudices, beliefs or social status. These experiences of loving and being loved and of simple human companionship with other children are so universal that they can be considered another kind of human unity. These experiences come during the child's first two or three years, at the time when the child is most impressionable and plastic, the period of life when the most important part of one's character is formed. Such memories may have been forgotten by the conscious mind, but they are still in the memory and can be revived enough to influence conscious feeling and can cause changes in conduct. Such a creature deserves our respect.

Such memories, in the context of the other similarities and unities, are at least an important part of the seed of human unity or the spark of decency on which the nonviolent resister relies as existing in his violent opponent. Such memories and human similarities and unities are subtle and may seem intangible, but they are real enough and strong enough, if time is given for their growth, with patience and persistence, to vastly improve human conduct.

"But," the wary sceptic may argue, "what if you find yourself in a police state, with all the means of communication controlled by the State? Then there is surely no basis for optimism." But that is a mistake, and for this reason.

In every human body the nerves that control our voluntary muscles and therefore our conduct, do not stop in the lower brain but come up to the front part, the cerebrum, the place where we do our thinking. Wilder Penfield, the distinguished Canadian brain surgeon, has located the place where our memory resides as near the right temple, and the area where we do our comparing preparatory to making decisions, is an adjacent area. We are so made that we see what we have done and compare it with our thinking. That is, we seek the truth, or so it seems to me. Our nervous structure compels us to seek the truth. No exterior tyranny can alter the nervous structure of human beings. Sooner or later man must seek the truth and want his freedom to do so.

RICHARD B. GREGG

Eugene, Oregon