TO SET IT RIGHT

A THEME which runs through the work of very nearly every thinker of importance is that human beings live in two worlds—the world as it is and the world of their dreams. One world is actual, the other ideal. The difference between the actual world and the ideal world makes the problem of philosophy. Overcoming that difference is the task of religion. The desire to unite with the ideal comes from the heart. The means are discovered by the mind.

But the means of realizing the ideal are not clearly determined—except, sometimes, by rare individuals—and there are times, even centuries. when it seems that they are not understood at all. In such periods of virtual hopelessness men devise remedies which go to extremes. If they have "social" inclinations they may become nihilists; others choose suicide as a personal escape. Some individual solutions are less drastic. **Ouietist** withdrawal from the world is a familiar choice, the Stoic's personal integrity another. Denial that an ideal world exists-"No problem!" as B. F. Skinner might put it—is the pseudo-solution adopted by those who suppose that finding answers to a swarm of little problems is a feasible substitute for wrestling with one big one.

Yet the questing for the ideal is never successfully ended by these interruptions. Intervals of depression give way to spirited renewal of the urge to identify and realize a better world. Nihilism is not a stance in life but submission to entropy. The withdrawn human is still sluggishly animated by the will to live, and in time his discouragements may wear away. Even the suicide, for all we know, may find himself entangled in a subjective existence by persisting necessities of which he was not informed. What if death merely camouflages a vestibule as crowded with transients as the entry to birth? We know practically nothing of these things.

The point, here, is the futility of either stubborn denials or detailed assertions concerning the two poles of reality—the everyday world and the ideal—which make the field of our lives. Yet we know a few things which are manifest certainties. We know that a being without purpose—which has no goal or ideal—cannot be called human, and may not be anything at all. Isolation from purpose or meaning seems the only reasoned account we can give of extinction or annihilation.

Well, if, joining with Plato and St. Paul, with Shelley and Whitehead, with the Buddha and Hamlet, we acknowledge the existence of two worlds, what then shall we do? An early obligation will be to admit this abstract duality, but then a practical plurality. The worlds may be only two, but our conceptions of them are many. Volumes could be filled with enumeration of the similarities and differences between human ideas of the two worlds. We have, then, an elementary principle for ordering our thought—the postulate is that there are two worlds, but they are not the same as the countless imperfect approximations of them in idea. A "real" world is the limit sought (but not reached) by the approximations. show what complication results from all this, one could list various possibilities. One could argue that men live in the "real" physical world but imagine it ruled by the laws of an invisible world—which is only their invention. This was the hard-headed assertion of the medieval Nominalists, later adopted by modern Materialists and most philosophers of science. One might also propose that we really live in the mental or ideal world, but are deceived by our senses into supposing that our life is physical. This is close to the Platonic position.

It should be added that since one man's invisible world is different from another's,

disagreements and insecurities, with resulting hostilities, are inevitable. Hence religious wars, heresy trials, and rival ideologies. Corresponding difficulties plague our thinking about the visible world. There was the Ptolemaic cosmos, then the Newtonian cosmos, and now we have the Einsteinian cosmos. Actually, what we claim to be the world made known to us by science is a closely woven web of intellectual abstractions mostly mathematical abstractions—a generalized version of sense perceptions, in terms of This construction must be prevailing theory. distinguished from the "true" physical world—a world that has reality only in ideal scientific hypothesis, which will be known to us, they say, after the promise of perfect scientific knowledge has been fulfilled. This is the dream world of physics and biology. The differences of opinion as to its nature and constitution are not only a function of time, since at any moment there may be several opinions on fundamental questions. Present-day astronomers, for example, are by no means in accord on how the universe came into being.

We may conclude, then, that the visible world is a variable, that the invisible world is a variable, and that the play of our thinking about ends and means in relation to these poles of reality is also variable, yet undeniably and often agonizingly real. Who has not, in the midst of his struggles, like Hamlet, taken time out to exclaim—

The time is out of joint; O cursed spite, That ever I was born to set it right!

What sort of evidence have we of the reality of the invisible world? This is something like asking, "Do you have a mind?" John B. Watson's answer to the latter question was a resounding *No!*, and he persuaded a great many learned men to agree. Long before Watson, Thomas H. Huxley said that the mind was in effect the random "noise" made by the bodily mechanism, and more recent skeptics have called it the nonexistent "ghost in the machine."

Leaving inspection of this inventory of denials to another time, we turn to one of the most persuasive arguments we know concerning the reality of the ideal. In the first chapter of his Men and Nations (Princeton University Press, 1962), Louis J. Halle invites his reader to take a pencil and draw a straight line. It will not be altogether straight, of course, but only more or less. The writer is instructing us in something that every beginning student of geometry is obliged to learn: the difference between the ideal and the actual: between straight line in its perfection as concept and straight line as a construction on paper—or out in the physical world, in a building, say. The constructed line will never be perfect; it can't be. But for practical purposes it will do. Mr. Halle says:

This discrepancy, between the definition [the shortest distance between two points] and the example, demands reconciliation. How do we reconcile it?

We do it by distinguishing the idea from its concrete material expression. The concrete expression represents an effort to render the idea that, carried out within the natural limitations of the material world, can do no more than suggest it by approximating it as closely as possible. What was drawn on paper is not itself a straight line, it is merely suggestive of a straight line.

As a materialist I could proceed to say that only the line on paper has the value of what I call reality, while the conceptual line of the definition, having no material or measurable existence, is an illusion. I note, however, that in this case the conceptual line, the idea, assumes the fundamental role in the human mind. It is more "real" for the mind than the visible phenomenon. It comes first, since it was what we were trying to represent when we put pencil to paper. It also comes last, for when we look at what has been set on the paper our mind of its own accord eliminates as defects to be disregarded the width of the line and its irregularities of direction. Our mind translates the visible, replacing it with the idea, which was the model by which the shape of the visible was determined. Therefore the idea, in the end as in the beginning, has the more vivid reality. The material phenomenon is only an imperfect imitation of it.

I have described the dualism, here, in particular terms. We can give it a general expression by identifying it with the two contrasting but interdependent terms, perfection and imperfection. Imperfection characterizes everything in the concrete world, thereby paradoxically associating the concrete world with the world of perfection demonstrating the prior existence of the world of perfection. For how can imperfection be, except in terms of perfection? It is only by falling short of a standard of perfection in the mind that anything can be imperfect. In the very act of saying that a line is not perfectly straight we proclaim the existence of an idea, of the perfectly straight line that can have no material embodiment. It follows that the world of ideas is fundamental.

The question that this demonstration—and it is a demonstration—immediately suggests is: Why, from just such simple logic, has not everyone become a Platonist? It seems a good answer to say that we do not commonly notice the fact that we deal with ideas far more than with imperfect appearances. While we continually talk and write in Abelard's conceptual code, we imagine we are speaking of things. conversion from thing to idea is automatic and continual. Or rather there is no actual conversion because, first and last, thought always has reference to the *idea* of the thing, not the thing. So far as we are concerned, the real is the idea. The thing has only a borrowed existence from the idea, in which its reality, its essence, its logos, resides.

A further explanation of our confusion of idea with thing lies in the fact that our "ideas" are by no means faithful to an order of perfect originals, timeless and true. These ideas are only *our* limited originals; they lack the universal fidelity we sometimes suppose them to possess. Human ideals are *intermediate*—having their place somewhere between the world of things, which they endeavor to alter to a better shape, and the visionary world which remains defined only by abstract reasoning and human longing. It is as Louis Halle suggests:

We men identify the ideas of propriety that each of us respectively entertains with the *Logos*, each of us basing his allegiance to them on the belief or

assumption that they represent what is right in terms of what God or nature intended. "There is," says Cicero, "... a true law—namely right reason—which is in accordance with nature, applies to all men, and is unchangeable and eternal. . . . It will not lay down one rule at Rome and another at Athens, nor will it be one rule today and another tomorrow. But there will be one law, eternal and unchangeable, binding at all times upon all peoples. . . . The man who will not obey it will abandon his better self, and, in denying the true nature of man, will thereby suffer the severest penalties."

Cicero identified his own views of human propriety with this natural law on the assumption that the logic of his own mind was the "right reason" which corresponded to it. The difficulty is that the logic of other men's minds has represented "right reason" otherwise, thereby arriving at other views of human propriety. The *Logos* itself may be the same at Rome as at Athens, tomorrow as today, but the identification of it by the men of Rome has been different from the identification of it by the men of Athens, and the identification made by the men of one age has been abandoned in favor of another identification by the men of the next.

This experience suggests that, unlike Cicero, we should distinguish between the ideas that we have in our minds and the *Logos* itself. The *Logos* remains largely unknown: the ideas in our minds represent only our partial apprehension of it, or our supposition of what it must be.

There are, it seems, several important considerations. First, it is of great consequence whether or not human beings accept that their lives ought to be devoted to the pursuit of an ideal—a what-might-be instead of the what-is—and accept that this goal is inscribed, however obscurely, in the true nature of all. This outlook has its importance because of the sort of energy it evokes in human life, from the sense of purpose it imparts. Here success or failure is not at issue. The concern is with striving, direction, intent.

The decision to pursue an ideal is beyond all doctrine, prior to the claims of logic and feasibility. Involved is acknowledgment of the comparative autonomy of human life and recognition of the field of choice which constitutes the human condition.

A second consideration grows out of our limited and changing conceptions of the ideal. It is that all human communication is doomed to some degree of misunderstanding, some measure of disagreement as to meanings and goals.

A third and probably most important consideration is that we can hardly expect to have accurate knowledge of ourselves. How can we know ourselves without knowing the difference between our own conceptions of the Good and the True and the universal norms that are represented by the *Logos*—Nietzsche's "true world," Buber's Eternal Values, Plato's Archetypal Forms or Ideas?

Are these matters, then, as hopeless as they sound? No, they are not. There has been too much wonderful striving and glory in the human past for us to reach this conclusion. During the operation and play of natural relativities certain underlying qualitative constants continually reappear—ardor, vision, enthusiasm, companionship, compassion, altruism, loyalty, commitment—and all these excellences generate confidence in another species of knowing when the human enterprise is not regarded statically or analytically, but as a going and cooperative We find, for example, that we concern. understand one another quite well in these terms. The understanding is not only cognitive but appreciative as well. A wonderful overlapping of identities results from shared longings and ideals. Reality comes very close to us then, giving men extraordinary resolve.

These understandings span wide abysses of space and time. They are not complete, but they need not be—perhaps shouldn't be—for the members of a going concern. Two sorts of successful communication are known to us—those in great literature and those between friends. The tutelary deities of Rome may not be on speaking terms with the household gods of Athens, but for a particular Roman who knows and honors a particular Athenian, the gods merge into one. We owe to a splendid company of

scholars our recognition of the common ideals in the religious and philosophical teachings of the Enhancing harmonies result from their comparison. The Taoist meets kindred of Lao tse in English poetry. The Christian rediscovers the self-sacrifice of Jesus in the ceaseless labors for mankind of the Bodhisattva. The Kabalistic Sephirothal Tree springs from the same roots as the Ashwattha of India, and the Yggdrasil of the northmen supports the same pulsating network of life. European and American students celebrate the splendors of the Mahabharata, translating the Bhagavad-Gita into many tongues, contemporary scholars deepen their insight by exploring the subtlety of old Greek, Neoplatonic, and Renaissance thinkers.

But if the matter is not hopeless, the curtain dividing the two worlds of man seems almost impenetrable. In an unpublished essay on *Hamlet*, Louis Halle observes:

The paradox of Hamlet's position was that, to realize the normative [ideal] world in action, he would have to embrace all the sordid devices of the existential world. He would have had to practice corruption to overcome corruption. He would have had to adopt the pragmatic means of conspiracy: secrecy, double dealing, hypocrisy, and violence. He would have had to give himself entirely to the struggle for personal power, thereby corrupting himself—so that he might indeed have ended as Nero did.

It is a standard dilemma of the world that has followed the expulsion from Paradise that one can hold to one's ideals, avoiding their betrayal in practice, only by withdrawal, by refusing to participate. Hamlet, moved by a revulsion against the corruption of the existential world, was consequently inhibited from embracing its devices even in the name of ushering in the ideal world.

At last the problem is really stated. It belongs to the age we have made. There are few difficulties with the admission of ideals in a golden age. Wise men are known in every community. The principles of things are embodied in human practice and the virtues are rewarded. But now the world moves on a downward path by means of

sordid devices. Its rules are not merely different from the ideal rules: they are opposed; they violate the good from beginning to end. The present, at any rate, and more so than in Hamlet's time, seems to require unrelenting reversals of the good, the true, and the beautiful. No longer does our world seek to be an "approximation" of the invisible order, but declares an independent course, insisting on its own terms. It is a situation which gives new currency to the story of Prometheus.

What of Mr. Halle's expression, "standard dilemma of the world"? Is it indeed true that one can hold to one's ideals only by "refusing to participate"—by, as we say, "opting out"? There are times and situations when it certainly seems so. Yet even in our own age we have had moral absolutists—Tolstoy, Gandhi, and some others not well known. They "withdrew," you could say, from institutional participation but not from human participation, which is admittedly very difficult to do. Tolstoy attempted it as a rich man, Gandhi without wealth.

The thing to notice, perhaps, is not their "success" in the changes they tried to bring about, but their impact on the world. They were only two, and while there have been and are others of the same persuasion, the influence of these two alone is certainly awe-inspiring.

Yet not enough to turn the world around or to restore the faith of human beings in the ideal world. There will doubtless be others during the remaining years of the twentieth century who will work toward the same high goal. Will they be more successful?

Such questions, we should note, are commonly asked in a bargaining mood. The idea is that if we agree to work according to the rules of the ideal world, then it is only right and fair for the results to appear in the visible world. "We *live* in the visible world, don't we?" Isn't that where the pain is felt, where injustice wears down people's lives, where the change has to take place, and *soon?*

This is the argument that, unhappily, supports Mr. Halle in pointing to a "standard dilemma." The dilemma exists because there has been *no contest*. The proposal is for a charade. Its reality-testing is to be applied to the wrong world. The first law of the ideal world, translated into this-world jargon, is—"No deals!" The currency of contracts with ideals, when demanded and accepted, will purchase only illusory goods.

You can't drag the timeless world down and make it function here. Yet there is one possibility: If there are enough human beings who will learn to know both worlds-and how to live in time by the light of the timeless—then we might get some examples of how the two orders may work in collaboration and even mutual support. One man, doing this by himself, seems like an ugly duckling. The beauty and the wonder of his life are lost in the shadows cast by other people. But let a dozen do it, working together, and even those few can accomplish synergistic demonstrations. Ruth Benedict and A. H. Maslow, looking at very small societies, saw enough of synergy in action to cause them to formulate this principle as a social law.

REVIEW RECONSIDERATION OF MAN

IN *The Unfinished Animal* (Harper & Row, 1975, \$10.00) Theodore Roszak attempts to understand the human condition in fresh terms, to take into account past lines of inquiry into this engrossing question, to measure their value and to chart, however tentatively, the direction of future investigation. Two paragraphs toward the end of the book give his general diagnosis and a look ahead:

Once we accept transcendental potentiality as the essence of human nature, it becomes clear why material abundance and physical power, no matter how vastly multiplied, still leave us ungratified, restless, genocidally violence-ridden, or perhaps worst of all, plain bored with our existence. It is because these are, at best, means to an end, and, ironically, an end which may require that we finally outgrow the appetite for affluence and power we have struggled so long to satisfy. We finally understand the discontent that so persistently warps the lives of people and turns them ugly, even when they would seem to have every material blessing they desire. It sterns from the thwarting of our paramount growth need: the need to evolve beyond the restrictions of time, matter, and mortality.

Our future image of human being, then, will be a strange, tense blending of the optimistic and the tragic: a study in paradox. We are optimistic in that we assume, not a radically "fallen" human condition, but a whole and healthy nature at the core of us; not an original sin, but an original splendor which aspires to transcendence and succeeds often enough to sustain a godlike image of human being. We are tragic in that we see how easily, in our chameleonlike freedom, we misdirect that energy toward lesser goals, unworthy objects. The psychotherapy of the future will not find the secret of the soul's distress in the futile and tormenting clash of instinctual drives, but in the tension between potentiality and actuality. It will see that, as evolution's unfinished animal, our task is to become what we are: but our neurotic burden is that we do not, except for a gifted Few among us, know what we are. What is most significantly and pathologically unconscious in us is the knowledge of our potential godlikeness. And, like Freud's repressed libido, that buried knowledge nags at the corners of the mind, demanding the energy it

has been denied—until we grow sick with the guilt of having lived below our authentic level.

Unfinished Animal is the body of evidence provided in support of these general conclusions. It is a survey of our intellectual and moral history, from the Enlightenment up to the present, with some backward glances at ancient spiritual ideas which had very nearly lost their meaning by the seventeenth and eighteenth centuries. The Renaissance skeptics and champions of science were the architects of the Brave New World that would do without transcendence; for them the corruptions in religion had placed it beyond the pale. They would not attempt "the reclamation of the mysteries" but declared an end to the age of mystery. Science and reason would reveal all.

The modern "secular consensus" is our inheritance—the matured evolution of Enlightenment assumptions. By recognizing the importance of what this consensus denies or ignores, we are able to see its omissions as the source of modern problems:

All is bound to go wrong with revolutions that work within the secular consensus because, at last, the secular consensus is wrong. It does not go deep enough to touch what is most fundamental in human nature, and so it cannot understand our discontent or bring us fulfillment. . . .

Because the secular consensus and all the politics connected with it stop short of our spiritual needs, at most devising anemic secular substitutes for what the visionary energies can alone supply, they progressively enlarge the spiritual void in our lives. And that void is the prime political fact of our time. It is the secret of our discontent, the anguish that animates our psychopathic conduct. The strenuous and foolish things that people in our time seek to do with history—to multiply thermonuclear overkill endlessly, to raise up economies of limitless growth, to build conglomerate empires that straddle the globe, to turn the planet into one, vast industrial artifact, to produce without limit, to consume beyond all sane need, to propagandize the world with one's ideology-all this is what people use to fill the emptiness inside them. So too the mindless mass movements to which they surrender themselves in desperation; these also are among the corrupted stuff they cram into the world. . . . It is despair that drives

us into the maniacal history-making which is the hallmark of our age. But there was another line of influence which began or surfaced all too briefly during the Renaissance. Not all the innovators and reformers of the sixteenth and seventeenth centuries were aiming in the direction of the "secular consensus." Mr. Roszak makes Pico della Mirandola the principal spokesman of this deeper current, which was indeed an effort to reclaim the Mysteries. A little before Columbus' discovery of America, Pico set down his Oration on the Dignity of Man-a preface or introduction to the nine hundred theses he offered to argue with the doctors of the Church, a confrontation which the Pope prohibited because of a claimed heretical tendency. It was indeed hereticalgloriously so. In this Oration, Pico declared the nature of man to be self-determined. Unlike animal creation, in which species types are formal and fixed, man could, he affirmed, raise himself to sublime heights of individual growth, or reduce himself to less than the brutes. This, Pico asserted, is man's nature—he is to create himself.

Roszak comments:

In Pico's statement, we have, for the first time in the modern West a vision of human nature as unfulfilled potentiality, of life as an adventure in self-development. Humanness, Pico tells us, is not a closed box but an open door. . . leading to an open door . . . leading to an open door some door . . . leading to an open door. And he invites us to make our way through all these doors, discriminately experiencing the fullness of our identity. . . . He asks us to see ourselves as a grand spectrum of possibilities whose unexplored regions include the godlike as well as the diabolical.

Had Pico's program for human development become, as he wished, the educational standard of our culture, Western society might have freed itself from the literalism and dogmatic intolerance of Christian orthodoxy, without rushing into the dismal materialism that dominates our scientific word view. We might have found our way into a new culture of the spirit, open to universal instruction, grounded in experience, capable of liberating the visionary dimensions of the mind. But the fate of Pico's way was to become a dissenting counter-current to the cultural mainstream: either a saving remnant or a lunatic fringe, depending upon one's viewpoint.

Pico is Roszak's keynoter, since the basic intent of this book is to give a new meaning to "evolution" so far as human beings are concerned. From Darwin, as he points out, we acquired only

a theory of biological process, with no attention to those aspects of the human being in which we have and *live* our being—our hopes, values, and aspirations. Can there be evolution here?

What are we, anyway? What is the mind—the stuff of both our genius and our pain? What is "knowing"?

Knowing, the Enlightenment made plain, is more than emotional assumption. But in the twentieth century we are finding out that knowing is also more than cool cerebral calculation. What is the larger meaning of our oscillations between feeling and intellectual cognition? Where and how shall we look for truth? In ourselves, most certainly, but in what terms, with what verifying processes?

These are the background questions which occupy Mr. Roszak throughout this book. His Cook's tour of the "consciousness circuit" is intended to illustrate the diversities of human longing in the present, and also to warn of the clear possibility that, without reliable guidance—a strong inward monitor—these psychic and supposedly "spiritual" adventures could easily turn into "a lethal swamp paranormal of entertainments. facile therapeutic tricks. authoritarian guru trips, demonic subversions."

How does one find one's way through this jungle of tropical growth? The Ariadne's thread for this writer is the quality of his own longing, his feeling for transcendental possibilities which, he has become convinced, are somehow present in all human beings, just as Pico said. In one place he remarks: "The trick is to assert hierarchy without producing repression." But this is no license to obey every hedonistic impulse. becomes possible only if the search for the self is united with the generous labors of the karmayogi—the man who works in the world for the benefit of all. "For what honest knowledge can there be of the great unity on the part of those who cannot even achieve a compassionate human solidarity?"

The author locates three stages of reaching toward the higher life in Western history. First there is the Renaissance impulse given by Pico and Ficino during the Florentine Revival of Learning. Then come the Romantic poets. Climactic in the was nineteenth century the Theosophical Renaissance, pioneered by H. P. Blavatsky, in whose work Roszak finds "the first philosophy of psychic and spiritual evolution to appear in the modern West." He makes no pretense to having seriously investigated Theosophy, but notes that Madam Blavatsky was the one who pointed out that "Darwin simply did not go far enough." Interpreting, Roszak points out that Darwinsim, by focusing on the purely physical, "wholly omitted the mental, creative, and visionary life of the human race; in short, it omitted consciousness, whose development followed a very different evolutionary path." In Isis Unveiled Madame Blavatsky declared that evolution really begins with a descent from spirit, and then an ascending return to "the primal source of all."

Conceivably, this discussion of H. P. Blavatsky's works will mark the beginning of more serious inquiry into the hardly understood area of "Occultism." There has been far too much loose talk and too many insupportable claims concerning this mysterious subject, and one who goes to its sources in the original Theosophical literature of the last century might find relief from much confusion and elaborate pretense.

Roszak's concern with such works is for their direction of thinking about human potentiality. He is interested in restoring balance to the conceptions of human nature and human possibility. His book is a deliberated reconsideration of a wide range of assumptions about the nature of man.

COMMENTARY ONE CHANGE FOR THE BETTER

IN analysis of the Declaration of Independence—in TheAmerican Testament (Praeger, 1975), a book which includes the texts of the Declaration, the Preamble to the Constitution, and Lincoln's Gettysburg Address— Mortimer Adler and William Gorman quote from John Adams to show that years before the Revolution the colonists were vigorously opposed to any limitation of their freedom. Adams wrote in 1765:

The people, even to the lower ranks, have become more attentive to their liberties, more inquisitive about them and more determined to defend them, than they were ever before known or had occasion to be, innumerable have been the monuments of wit, humor, sense, learning, spirit, patriotism, and heroism erected in the several colonies and provinces, in the course of the year. Our presses have groaned our pulpits have thundered, our legislatures have resolved, our towns have voted, the crown officers have everywhere trembled, and all their little tools and creatures, have been afraid to speak and ashamed to be seen.

These were days when the committees of correspondence were beginning to make their influence felt. Is there anything similar going on One broad tendency is available for today? comparison. Instead of committees correspondence there are scores and even hundreds of little papers and newsletters of growing circulation, gradually creating another community of common concern. But in most of these papers the theme is not rights but responsibilities—the idea of human responsibility to the earth and its waters, to the soil and the life it supports, and to the natural needs of all earth's inhabitants. It is as though Mazzini's great revision of the eighteenth-century conception of Revolution had at last taken hold. He said in 1835:

Right is the faith of the individual. Duty is the common collective faith. Right can but organize resistance: it may destroy, it cannot found. Duty builds up, associates, and unites; it is derived from

general law, whereas Right is derived only from human will.

A good example of this change in theme is James Boggs' talk to the architectural students at the University of Michigan, quoted in this week's "Children." These are indeed days when those whose country is the world are actively "creating a new conception in people of what is necessary to a community."

CHILDREN

. . . and Ourselves

WHERE SOCIAL CHANGE BEGINS

RESPONDING to a recent request for suggestions from the United Nations Environment Program, the editors of *Checkpoint*, Harriet and Howard Kurtz, spoke critically of the power accumulated by nations, which can be used either to destroy or to protect and serve:

In the past generation the Kremlin and the White House have directed the powers of science and technology to produce the power to destroy humanity in vengeance, in one ugly way or another.

Neither superpower yet has unleashed its creative power for developing and demonstrating the future global technologies of interdependence. . . . the worldwide systems and institutions (more complex and effective than the present UN) to guard the security and independence and development of all nations, large and small.

While the suggestions which follow do not seem unreasonable—in view of the technological capacities and organizational facilities ostensibly at the command of these powers—it is relevant to ask whether challenging "nations" to use their "creative power" makes any sense. Do nations, as such, *have* any "creative power"?

Nations are institutions brought into being to serve partisan ends. It is now generally agreed that, whatever its services in the past, the modern nation-state has outlived its usefulness. As a peace-maker it is certainly a total failure. Randolph Bourne declared years ago that "War is the health of the State," and whatever his critics have said, he has not been contradicted by history.

Governments are supposed to be tools of the people, but "superpowers" are not tools at all. Superpowers displace the humane objectives of people with ends that create one international problem after another, often leading to violence and slaughter. What can possibly result from asking these powers to suddenly turn "creative" in the use of their technologies?

Before we make proposals for international cooperation, we might consider the record of cooperation at home, to see what happens to the common welfare within the boundaries of the United States. Have we shown any noticeable "creativity" at the national level?

In February, 1970, the *Scientific American* published a report on the deliberations of a National Academy of Sciences panel on technology assessment. This was the sort of inquiry which asks: What is this particular technology good for, what may it be bad for, and should it be encouraged, modified, or abandoned? The report was by two members of the panel. In one place they said:

The assessment of technology that is done by government agencies . . . is profoundly affected by the legal system. The predominant mission of each agency, as set forth in the law determines the pattern of assessing technology. Weather modification provides an example. The Bureau of Reclamation looks for ways to increase rainfall in the dry Western The Department of Agriculture, mainly concerned with reducing crop losses, sponsors research in suppressing storm damage. The Federal Aviation Administration is interested in ways to dissipate fogs that hang over airports. None of these agencies considers total effects. In the case of regulatory agencies, limitations by law often prevent the agency from considering the complete problem. . .

The achievement of a better system for assessing technology faces major obstacles. The society is illequipped to handle conflicting interests. It does not know how to value in a quantitative way such goals as a clean environment and the preservation of future choices. Analytical tools are primitive, and crucial knowledge is often missing.

If we've hardly begun to order our home technology for the common good, how much chance is there that we will even try to be "creative" in collaboration with other nations?

The technology is one thing—the habits of the people who use it are another. Institutions incorporate people's habits into rigid, bureaucratized patterns of behavior, and nations incorporate some of people's most destructive tendencies, while isolating them from popular control.

If, then, there is to be a "creative" use of technology, we shall first need to generate institutions which embody very different habits. It would probably be best to start simply as people, keeping the institutional side of the effort to an absolute minimum. (The Intermediate Technology Development Group in London would be an excellent model for such minimum institutions. It makes a cooperative focus for already existing special capacities and resources.)

But changing the habits of people is the real problem. Where should this begin?

One answer to this question was the subject of a talk by James Boggs, of Detroit, to some graduate students in architecture at the University of Michigan last December. He said:

One of the main reasons why we cannot create communities today—even though we can create almost any material or technical thing that we can imagine, and even though we all feel the need for community—is that so many young people are still going to college to make careers for themselves as individuals. Creating communities in the modern world can't just happen naturally. It requires people who are deeply convinced that being part of a community is more important than material things or the status which individual success brings—but which are the motivation for these young people going to college in the first place.

Mr. Boggs is talking about the habits that have been bred into Americans for generations—habits which make community, cooperation, and "creative interdependence" seem like remote and unfamiliar goals. The speaker continued:

The reason why it is so hard to get beyond an individualist viewpoint is that the philosophy of individualism is so deeply rooted in the real history of this country. For two hundred years, the American people have believed that if each individual pursued his own goals, it would promote the common good of the whole society. Therefore the individuals didn't have to ask themselves whether what they wanted to do advanced the society. It was assumed that the advancement of the individual advanced the society automatically. This meant that individuals didn't have to make political decisions in relationship to the whole society. This individualism has been progressive in the sense of promoting the

technological development of this country. But in the process of pursuing our own individual happiness, we have lost our individuality and we have also given up our rights and responsibilities as citizens.

James Boggs has some suggestions for turning attitudes around—for the formation of new habits of thinking:

For example, should we convert many of the auto plants into locomotive plants so that we can create rapid mass transportation, utilizing the machine and engineering skills which are so abundant in this country?

Should our science classes in high schools and colleges be turned into collective workshops where the students work together to resolve the problem of extracting the sulphur in coal, so that we can use the coal for energy?

Should every school create a work-study curriculum so that, from elementary school onward, children can learn how to maintain and repair the school building, developing the skills of plumbing, carpentry, window glazing, painting, sewing, cooking, cleaning, while at the same time contributing to society?

Why can't every school have a large greenhouse where the children can practice growing food so that they can learn the laws of biology in a useful and meaningful way?

Why can't we have a crash program to develop millions of doctors who, after basic training for a few months, will learn by doing, instead of the elitist schools we now have which perpetuate the ignorance of the masses of people about their bodies?

Should we begin to build new communities in the vast unpopulated sections of this country, in the process creating a new conception in people of what is necessary to a community, so that people will not continue flocking to the cities where they live alienated, lonely, and selfish lives, to the point where we are now more afraid of one another than we should be of wild beasts?

These are ideas for beginning to work on the reformation of character in the United States. No institution can embody or further the goals which critics offer for adoption until those ideals have become a natural expression of the lives of the people themselves.

FRONTIERS

Changing Attitudes in Science

BIG books sometimes come our way as the result of suggestions from readers. The latest acquisition (from the library) is the two-volume study, Attachment and Loss (Basic Books, 1969, 1973), by John Bowlby, an English psychiatrist. It presents the fruit of years of study of children who have been separated from their parents or others on whom they depend. The author explains that since so many children suffer in this way, with "easily observable long-term effects," such research provides "a valuable point of entry from which to plan projects aimed at casting light on the immensely complex and still deeply shadowed field of personality development and the conditions that determine it." At the end of his second volume, Dr. Bowlby remarks:

Human personality is perhaps the most complex of all complex systems here on earth. To describe the principal components of its construction, to understand and predict the ways in which it works and, above all, to map the multitude of intricate pathways along any of which one person may develop, these are all tasks for the future.

In short, he conceives the enterprise of reaching toward self-knowledge as barely begun.

A key observation in this work is that "nowadays to attribute purposiveness behaviour and to think, if not teleologically, at least teleonomically is not only common sense, as it always was, but also good science." statement has importance since it reflects a great change in the scientific outlook. "At one time," as the author says, "to attribute purposiveness to animals or to build a psychology of human behaviour on the concept of purposefulness was to declare oneself a vitalist and to be banned from the company of respectable scientists." This, quite evidently, is no longer the case.

Dr. Bowlby's discussion of his release or departure from the assumptions of Freud becomes intensely interesting for the reader who tries to understand the motives behind scientific inquiry. Quite apparently, there are two ways in which human beings regard life and experience. One is to start out with a basic assumption about the meaning of life and then to find in the facts of experience both confirmation and illustration of that basic assumption. This outlook seems basic and even inevitable, yet the past three hundred years of Western cultural history shows that this assumption can be ignored, suppressed, and denied. This is evident from the fact that science, as a cultural expression, has made a concerted attempt to deny all meaning or purpose in life, and to examine the facts of nature in their purely mechanistic relations. The object of science has been to describe how things work, not tell what they "mean."

Yet the thoughtful reader is always able to discern the "ghost" of human motive in the scientific machine. The quest for meaning cannot be permanently suppressed. It expresses itself in various disguises and keeps on whispering its presence. And in Dr. Bowlby's book it makes forthright appearance in his deep concern for children who suffer. He points out that Freud, adopting Helmholtz's view that "real causes must be thought of as being some kind of 'force'," constructed a "psychical energy model" to represent the human being. This model was not the result of observation of human beings but was borrowed from the physicists. "Nothing in his clinical observations," Bowlby remarks, "required or even suggested such a model." Freud's theory of psychical energy, he notes, is untestable, which in science is a "crippling handicap." This model taken by Freud from physics became a barrier to progress in psychoanalysis.

Why, one wonders, did the scientific movement abandon so completely the idea that fundamental meaning or purpose underlies all human life and behavior? Why did humane and well-intentioned men insist on morally sterile mechanical models to explain the facts of experience and the phenomena of human response?

This question can be answered only by the study of history. Materialism in the eighteenth century was a moral reform disguised as toughminded objectivity. Its intentions became explicit in the declarations of the most eminent spokesmen of the Enlightenment—in writers such as De Lamettrie, Diderot, and Locke. These committed reformers obviously didn't realize that they were abandoning moral purpose by excluding it from scientific explanation. They thought they were *saving* it from religious corruption.

A brief comment by Dr. Bowlby concerning the parents of children who have been made to suffer will show the partial—and quite legitimate—survival of this attitude in contemporary scientific medicine. He says:

The position adopted here is that, while parents are held to play a major role in causing a child to develop a heightened susceptibility to fear, their behaviour is seen not in terms of moral condemnation but as having been determined by the experiences they themselves had as children. Once that perspective is attained and rigorously adhered to, parental behaviour that has the gravest consequences for children can be understood and treated without moral censure. That way lies hope of breaking the generational succession.

You wouldn't call Dr. Bowlby a metaphysical thinker or a transcendentalist, but his final chapters, in which he writes about "pathways to growth" and the development of self-reliance, demonstrate the inadequacy of biological concepts to account for the best qualities of human beings. Originality and the creative spirit, he notes, have little in common with the ordinary criteria of mental health and adaptability. In his discussion of self-reliance he says that "human beings of all ages are found to be at their happiest and to be able to deploy their talents to best advantage when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise." And, paradoxically, the truly self-reliant person is one who most readily and wisely gives support to others when they need it.

These two large volumes by Dr. Bowlby can be read in several ways. They illustrate, first of all, the meticulous discipline and impartiality of a scientific investigator. They also demonstrate beyond doubt the humane ends and salutary contribution to human betterment of doctors devoted to child welfare. Finally, they may be read as a detailed account of how the basic conception of man as a purposive being is gradually gaining restoration, despite the technical reluctance of practitioners whose training once convinced them that moral or metaphysical assumptions would mean the breakdown or perversion of the scientific calling.