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THE BUILDING OF FAITH

IN a discussion of whether consciousness can or does survive the death of the body (in the *Newsletter* of the Institute of Noetic Sciences for the Summer of 1985), Willis Harman draws attention to "the new tolerance and openness" among scientists concerning such "metaphysical" questions. One reason for this fresh attitude is the recognition of the power of the mind to create a changed sense of reality, which has a decisive effect on the direction of serious inquiry. It is now well known to cultural anthropologists, Dr. Harman says, "that people who grow up in different cultures perceive literally different realities," and he gives as example what is called "remote viewing"—"sending one's mind out as far as hundreds or thousands of miles to 'see' what is going on at some remote location." Oil geologists may use this method in order to decide on where to drill, and archeologists looking for remains of past civilizations under thick layers of sand have been helped in this way. Harman comments:

> *It has been humbling for scientists to come to recognize, as they have been doing in increasing numbers over the past quarter century, that science* is *in a sense a cultural artifact: A different society with a different "cultural hypnosis" would have created a different science.*
>
> First of all, the science of any society is biased by the pattern of support—what research gets supported and what does not. A society will support research into areas that are deemed important by that society. Thus an industrializing society supported research into knowledge that would improve the abilities to predict and control and generate new technologies. Other areas might be quite neglected—as, for example, the area of human subjective experience. . . . The scientific knowledge that has been gained influences the way we perceive the world. *But* the way the world is experienced in our culture influences what kind of science gets developed.

This is actually a way of declaring that the scientific conception of "objectivity" does not exist. Honesty exists, impartiality exists, but not objectivity. Every observer stands somewhere in a world of which he has had some experience and through which he has reached some opinions concerning its circumstances, conditions, and the laws which govern the happenings that go on within it. The observer is unable to stand outside this world and look down upon it as though he had never seen it before. He may pretend to do this, but it him. Being an observer, he has a is quite impossible for stance. His very eyes, which are quite different from the lenses through which other creatures see, are a part of that stance. So is his memory of all that he has seen before. All his conclusions about what he observes are interpretations growing out of his beinghood in the past. The only avenue of escape from this confinement of his capacity to know lies in the possibility that there exist ways to transcend all ordinary sensory and intellectual modes of perception and to reach a kind of awareness which is unaffected by the way in which we perceive. We are able to *say* this, but imagining how it might work seems quite beyond us.

In fact, simply to suggest that the scope and direction of scientific inquiry may be defined by factors we have given little or no attention is upsetting to those who have grown up in our civilization. As Dr. Harman puts it:

> This may be a profoundly disturbing thought as one pursues its implications—that a society's basic experiencing of reality shapes its science as well as the reverse. In the history of Western society, a fundamental shift took place at the end of the Middle Ages. The most basic premises about the nature of reality underwent profound change. No one knows "why"—if indeed one can ask such a question of history. In what sociologists term the "secularization of values," the implicit metaphysics of the society of

> Western Europe fundamentally changed. (One aspect of that change we call the "Copernican revolution.") From that change developed a comprehensive science that could never have developed from the medieval outlook.
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> Improbable as it may seem to many persons still, we appear to be going through another such profound change. The evidence so far is scanty. We can invite the reader to observe the pattern; we cannot claim it demonstrable.

These great changes have to do with the way we think about the world, and, we find, the way we think about ourselves. In our present heightened self-consciousness, we are able to classify certain of the major changes we have undergone, naming them as metaphysical outlooks. Dr. Harman describes three metaphysical outlooks. Beginning with modern times, one is what is generally spoken of as Materialistic Monism—the only reality is Matter and its laws. All that is results from matter and its motions and can (or should) be traced to this origin. The second outlook is called Dualism, involving matter-stuff and mind-stuff. (Matter, of course, includes energy.) Matter tends to be primary in this account, perhaps because we think we know more about matter than we do about mind, which is slippery, to say the least. Finally, there is what Dr. Harman calls Transcendental Monism—the one reality of the universe is Consciousness. Consciousness was here at the beginning, and quite possibly never was not. The material world is the product of consciousness, it came into being through consciousness, and will finally be dissolved by it. We can intellectualize about consciousness, but our real access to it is through intuition. Intellect cannot originate intuitions but it may in a way confirm them. Yet the highest truths are beyond argument. Dr. Harman makes this brief comment:

> Quietly, a number of scientists find that when they take their total experience into account the [third] metaphysic fits best; besides, that seems to be implicit in the esoteric "perennial wisdom" of the world's spiritual traditions. For the present that position seems a long way from the picture of the world that emerges out of our various sciences. However in the long run it may very well be where science ends up.

Then, turning to the topic of his discussion—survival of consciousness after death—he says that if consciousness always exists, there is no issue. We have only the problem of learning how to *remember*—remember, perhaps, where we were before we occupied our present body, and conceive of what we may do, where we may go, when we leave it. Various kinds of "psychic research" will doubtless continue far into the future, but the real answer almost certainly lies hidden within ourselves, and will remain hidden until we gain a better understanding of ourselves.

In another of his papers—this one appearing in the Institute's *Newsletter* for the Spring of 1984—Dr. Harman considers the question of how to put an end to war: what, that is, individuals can do to help to prevent it. He applies the same sort of thinking to this question, saying at the beginning:

> Probably the most consequential single finding in the field of human consciousness research is the discovery of the startling extent to which our perceptions, motivations values, and behavior are shaped by *unconscious beliefs* which we acquire from our early experiences and from the cultural milieu. These unconsciously held beliefs (e.g. "I am inadequate," "The world is hostile") amount to an "inner map." These unconscious beliefs determine where we experience limits to our own powers, and they block us from fuller use of the inner resources available to us.

The fundamental question to be answered is: How do people change their minds? How are feelings of inadequacy and hopelessness overcome? There are, we know, extraordinary individuals who from time to time provide leadership through what they say and by their example. But when it comes to putting an end to war, they have not had enough allies. Yet Gandhi is an illustration of how much one man can accomplish. Dr. Harman has a good passage on how mind-changing takes place:

> The really fundamental changes in human history—such as the ending of the Roman era or of

the Middle Ages—have come about not through the arbitrary decision of a few leaders, but because vast numbers of people changed their minds a little bit. People give the legitimacy to all social institutions, no matter how powerful these institutions may seem to be. But on occasion people remember they also have the power to withdraw legitimacy. In the past, legitimacy has been withdrawn from slavery, cruel and unusual punishment, officially sanctioned torture, dueling, subjugation and mutilation of women, female infanticide. The legitimacy can be removed from war when people's consciousness changes—and their will to act (particularly women's)—is awakened. (The characteristics of a few female world leaders not withstanding, the feminine consciousness tends to be life-revering and nurturing, and war has always been almost entirely a man's game.)

Since World War II, war is no longer a contest between trained armies; it is the desolation of civilian populations. Its legitimacy must be removed; there is no other way. . . .

Recognize, understand the implications of and affirm that war can be outlawed only through a total change in the beliefs that separate nation from nation, persons from nature, and each of us from our deeper selves. No technical solution will suffice to remove the peril of the nuclear weapons—no nuclear freeze, no multilateral arms limitation agreements, no "Star Wars" that beam technologies to shoot down enemy missiles. Affirm that this change in the world mindset can be accomplished. The change will spread mainly person-to-person, and every individual's efforts count. . . . Because of the interconnectedness of all minds affirming a positive vision may be about the most sophisticated action any one of us can take.

And then he adds:

It is true that it may be simplistic to believe that if we just all love one another and speak peace, peace will come into the world. It may be simplistic because powerful unconscious forces make our love ambivalent, and our peace tinged with hidden conflict. Collectively held unconscious beliefs shape the world's institutions, and are at the root of institutionalized oppression and inequity. "Peace" will always be no more than a temporary truce if there exist widespread perceptions of basic injustice, needs unmet, and wrongs unrighted. But if one affirms the positive image regularly and persistently, eventually this seems to modify the unconscious beliefs, thereby changing the perception of the world—and even the world itself.

It is here, in the mixed motives, the unexamined habits and drives which animate so much of human behavior, that the obstacles to peace lie. The conscious self-examination and formation of resolve that characterize Mr. Harman's thinking do not need any attention from the rest of us. Those in whom these qualities come to predominate will lead to the formation of small groups of people who understand what needs to be done and who will begin to do it. They will show the way to continuous effort attended by patient recognition of what it takes to alter the pattern of human response to dangerous and difficult situations. Their collaborative work will lead to the formation of small counter-institutions that stand firm against the tides of mass reaction to waves of fear and the inflammations produced by nationalist propaganda. They are actively constructing the matrix which grows out of self-conscious evaluation, the social form of the future. They have the awareness which rejects shallow optimism and the moral conceits which underlie fickle behavior. They understand the difficulty of rebuilding a house while living in it. Some years ago, in *Half the House,* Herbert Kohl generalized the attitude they represent:

> It is difficult to live a healthy life in this culture, since we are all in complicity with its worst aspects. Paying taxes, using the freeways, buying more than we need, tolerating someone else's poverty, saving for our personal futures, worrying exclusively about our own children—all are acts of complicity. This is true . . . for me in my home in the Berkeley Hills, and for people in communes, collectives, alternative institutions of any sort. The sustained and responsible attempt to change aspects of this culture leads us into inconsistencies, into supporting what we want to destroy in many subtle and unexpected ways. However, assuming responsibility for this complicity and for our own failures is the only way I know to develop sustained action that might eventually lead to a humane society.

The problem lies not with these people but with the great majority who never have thoughts

of this kind—the people who are almost wholly shaped by habits brought forward from the past, who listen, not to themselves, but to the loudest voices of their time, and whose feelings of moral obligation are covered over by layers of custom and conventional counsels. While they are not immune to moral appeals, their decencies and virtues have developed in the confining atmosphere of mass behavior and they break out of these limits only from the pressure of extreme historical circumstances in which all that they know and believe in has come under threat. They may then be affected by simple utterances which touch the heart in familiar ways and by the example of the behavior of individuals whom they have come to respect. Gandhi spoke of this sort of influence, saying: "The example of a few true men or women, if they have fully imbibed the spirit of non-violence, is bound to infect the whole mass in the end." But after describing the ideal *Satyagrahi*—the conscious practitioner of non-violence—he said:

> We cannot all suddenly become such men, but if my proposition is correct—as I know it to be correct—the greater the spirit of passive resistance in us, the better men we will become. Its use, therefore, is, I think, indisputable, and it is a force which, if it became universal, would revolutionize social ideals and do away with despotisms and the ever-growing militarism under which the nations of the West are groaning and are being crushed almost to death — that militarism which promises to overwhelm even the nations of the East.

Twenty years ago, speaking before a gathering of religious leaders, Bayard Rustin, black pacifist and activist, colleague and adviser of Martin Luther King, told his audience:

> . . . in times of confusion we have got to face the fact that that which is practical—real politik—has never worked, and that it is in these periods where the historical concomitants are building so rapidly that that which appears to be utopian is in fact *the* way out . . . every project we have ever set up we have set up to reveal truth, not to win minor victories. . . . Knowing one may lose, one must still proceed, and the reason one must proceed, even though one has set up a strategy which is "no win," is precisely because no other possibility exists except to develop tactics of nonviolence. But they must be associated with and dedicated to concrete and specific efforts to bring justice, because peace proceeds, not from a vacuum, or not merely from a prayer or not merely from the attitudes of humans to be decent people, but from the reflections of these attitudes built firmly into institutions which eternally broaden not the cycle of revenge but the area of justice.

Rustin also said, "I am not fooled—I know that most of them are in non-violence for reasons far removed from why King and I are in it—they are in it because they see this as the only practicable way; it is strategic non-violence." Yet the results of strategic non-violence were better by far than the consequences of violence; however motivated, non-violence did no overt harm. Right here, in this difference between a generous-hearted reason for doing what is right and necessary, and doing the same or a similar thing simply because of the example and instruction of a leader whom one honors and respects, or from a calculation based on self-interest, lies the problem of the reformer. Another way of putting it lies in the question of how best to simplify in order to touch the minds and hearts of the masses, without distorting and corrupting the underlying principle. The Buddha found ways to speak to the masses without in any way practicing deception, while his instruction to his Arhats involved the greatest intellectual and moral subtleties. And there have been other such teachers, although numerically very few. One way of setting the problem faced by such leaders is well stated by A. H. Maslow in *Eupsychian Management:*

> In a nation in which most people do not have an identity or a real self, in which they are all confused about right and wrong, about good and evil, in which they are basically uncertain about what they want and what they don't want, then they are apt to admire and succumb to and look for leadership to any person who seems to know definitely what he wants. Since the democratic leader, the non-authoritarian person in general, is apt to be marked by tolerance and admission of ignorance, by willingness to admit that he doesn't know everything, sometimes for less educated people the decisive paranoid authoritarian

> can look very attractive and relieve the follower of all anxiety. . . .
>
> The person who is able to be decisive, who is able to make a decision and stick to it, who is able to know definitely what he wants . . . who is less influenced by contradiction—such a person is in general more apt to be selected out by others as a leader. I think this may be one reason why so frequently obsessional persons are more apt to be chosen as the administrative type or the executive type or the leadership type. They are simply more predictable, more definite about what they like and dislike, less changeable. The fact that this may be for pathological reasons need not be visible to the psychologically unsophisticated person.

The cocksure political leader may stir and create followers, while the wise and sagacious counselor instructs in self-reliance as the necessary though not sufficient path to right action. The great change Dr. Harman speaks of will surely come, but it will require the necessary time for the construction of reliable faith in a great many people.

REVIEW
"THE OTHER MEDICINES"

THE best thing about *The Other Medicines,* a book on methods of healing other than conventional allopathic medicine, spoken of as "scientific" in the Western world, is its clarity in describing approaches to illness of which we may have heard, wonder about, but know practically nothing. The author is Richard Grossman, a faculty member of the residency program in Family Medicine at the Montefiore Medical Center in New York City. (Doubleday is the publisher, $10.95 in paperback.) He believes that the time has come to expand and enlarge our scientific medicine by including with it, and in it, other forms of healing and treatment. There is a sense, he says, in which all medicine is "folk medicine." A great many remedies now used by the physician have a history going back hundreds or even thousands of years. They have their validation from entire cultures of the past and hardly need scientific confirmation by modern laboratory methods, whatever the rules of the FDA.

> I believe [he writes in an opening note] we are entitled to the most comprehensive vision of health and medicine of which the human mind is capable, and in my work in medical education and clinical practice, I have seen the marvelous ways in which systems as disparate as acupuncture and chemotherapy, herbal medicines and complex surgery, Yogic meditation and physiotherapy, breathing exercises and psychiatry can work together in a complementary way to provide greater benefits to ailing persons than any one of those treatments might provide alone.

Already, of course, a variety of unorthodox treatments are available, such as chiropractic, naturopathy, and homeopathy, and these and later arrivals like acupuncture and acupressure have informing accounts in *The Other Medicines.* Meanwhile conventional medicine has developed in ways which are repellent to many people. The family doctor who actually made calls and treated everyone from babies to oldsters has almost disappeared, being replaced, as Grossman says, "by a battery of specialists who have divided human health into such refined and isolated segments that one criticism of modern medical practice is that doctors know 'more and more about less and less'." He goes on:

> The complaint against over-specialization has led in turn to other critiques. Modern medicine's religious reliance on technological forms of diagnosis and treatment, its air of depersonalization that leads to objectifying patients as mere vehicles for disease; its quick and often arrogant invasion of the human body with surgery or intervention with chemotherapy; its startling costs that have contributed so hugely to the broken back of the world economy, and excluded so many impoverished people from its technical miracles; its elitism and paternalism that has made the white, male, affluent doctor into a high priest dispensing to the children of the tribe—all these charges continue to be leveled at the practitioners of contemporary scientific medicine, even as many of my parents' visions are being realized through its remarkable achievements. That medicine, which anthropologists have come to call "cosmopolitan" medicine, in contrast to the indigenous "ethnomedicines" of Africa and Asia and the "folk medicines" of subcultures everywhere, has survived criticisms and remains politically and economically dominant today, though in absolute numbers it is a minority practice, because more people in the world are served by the treatments of "ethnic" or "popular" medicine.

Many of the "other medicines" Grossman describes fall under the heading of "holistic," which has now lost its meaning from indiscriminate use. Yet the term must do duty until there is less general confusion about healing practices. As the writer says:

> The holistic camp wanted to explore the way the entire human being—his mind as well as his body, his powers of abstract thought as well as his ability to act in concrete ways, his capacities for innovation, spontaneity, and choice as well as his needs for food, safety, and shelter—could cope and grow in the environment of nature. . . .
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> The confluence of the holistic idea with the reemergence of Jungian psychology, the existential psychologies of Germany and France, the revival of interest in the Asian psychologies imbedded in the

> philosophies of Buddhism, Taoism and Hinduism, the similar Renaissance of American Transcendentalism as espoused by Emerson, Thoreau, William James, and the inward-turning appetites of restless American culture in the 1960s—all these came together to create the "human potential movement." Kurt Goldstein, Gordon Allport, Gardner Murphy, Carl Rogers, Rollo May, and Abraham Maslow were the psychologist-gods of it, and Martin Heidegger, Martin Buber, Aldous Huxley and Lewis Mumford gave it a literary and philosophical coloration. . . .
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> Were we able to see all medical knowledge without the parochial vanity of modernism, we could also see the other medicines as potentially complementary and supplementary to other treatments in dealing with distressful symptoms. We need not be confined to *either* scientific medicine *or* the unconventional therapies, but are blessed with the opportunity to use *both* the relevant treatments of the ancients and the modern, *both* the East and West, *both* the rationalist *and* the empiricist, both the sophisticated *and* the primitive. . . . I am convinced that in an era of increasing desire for self-management of our lives, and in a time when the general process of education in our society is again making the teacher the *educer* of the learning abilities of the student, the other medicines offer a thrilling and expansive means for amalgamating what Manfred Porkert has called the "pool of universal science." . . . I am hopeful that the sort of labels I have used—"holistic" and "conventional," for example—will in time disappear and that the bridge between the sharply outlined and well-defended estate of the unorthodox will be so busily traveled in the next few years that we will ultimately be speaking not of this or that kind of health, but only of health itself—and that we will be served and be serving ourselves with a medicine that is of all peoples and for all peoples.

Starting out with the "other medicines," Grossman devotes two full pages to how a dignified Chinese doctor in Chinatown took his pulse—for forty-five minutes—and why it took that long. The doctor, it seems, obtained 324 indications from the patient's wrist. Shortly afterward, the doctor told him about all the cold soft drinks Grossman had as a boy. How did the doctor know that, a good forty years later? He explained to Grossman's satisfaction, and they went on to other things. After reading this section on Chinese medicine, about the meridians, what they mean, how they are used, and the Chinese understanding of the "nervous system," you have the feeling of a little understanding of the subject. Grossman then had an acupuncture treatment, with needles, and he explains that, too, in a way that makes sense. His trouble with his sinuses cleared up.

Next comes a chapter on Hindu medicine and yoga. What is said on yoga is based on the aphorisms of Patanjali, who makes a clear distinction between Hatha Yoga, which is essentially physical, and Raja Yoga, which is a higher discipline.

The section on homeopathy begins with a list of the sort of questions a homeopath asks when he first sees a patient. Then comes the story of Hahnemann's research, his dissatisfaction with the orthodox medicine of his time, his determination to find out for himself by experimenting with remedies which he tried out on himself.

> To the homeopath, human beings—all living organisms, in fact—are unceasingly reacting to the environment and attempting to ward off danger and repair damage. The homeopath considers that this self-preserving and self-developing function is not the exclusive function of the body, or even of the mind, but rather attributable to a life-force that permeates and governs the whole person. It is on this cornerstone assumption about the process of illness and health that homeopathy is based; homeopathy is a vitalistic system, one predicated on the belief in the ability of the organism to heal itself, and the system that sees the symptoms therefore, as evidence of the organism's reactive powers. Believing as they do that these reactive powers *always* strive for cure, for harmony in the functioning of the organism and for a healthy balance between the body and the environment, homeopathists define symptoms, therefore, not as a part of the disease process but as the organism's inchoate attempts to cure itself. The profile of these symptoms therefore must be as comprehensive as the physician and patient can create, for the body's reactive force attempts to deal with stress by producing an unique set of symptoms which are the homeopath's clues to the one drug that will help.

Throughout this book herbal remedies in the form of teas and infusions of plant leaves, flowers, and roots are suggested, with frequent warnings concerning herbs that should *not* be used. The second part of the book, "Natural First Aid," is particularly valuable in giving direction for the preparation of herbs, with weights and measures, and a list of the terms used to describe the effects of the herbs. Explained are terms often employed in books on herbs such as "Infusion," "Decoction," "Fomentation," "Embrocation," "Tincture," "Poultice," and "Salve." Then there is a long section on first-aid "Procedures for Common Complaints," which begins with abrasions and burns and covers a wide variety of ills, including hysteria and indigestion. There is practical advice on the use of various herbs and common-sense suggestions regarding a selection of homeopathic remedies, of which there are more than two thousand in formal homeopathic treatment. Grossman recommends the use of a kit of twenty-eight of the most commonly used remedies, available from a homeopathic pharmaceutical house. Drawings indicate the acupressure points used in many common ills. The Bates treatment of palming for the eyes is described, and a variety of exercises for various parts of the body. There is also a section on massage.

In general, a reading of this book prepares the reader for taking care of himself with more confidence that he will do nothing harmful. Grossman does not attempt to instruct at a professional level, but to acquaint the reader with areas of self-care which are well within the competence of the layman. He has written an informed, interesting, and broadly useful book.

COMMENTARY
THE TASKS BEFORE US

THE contents of this issue all seem to have a part in the development of an unspoken theme—that the fundamental human project of the twentieth century is to get to understand how we think about our lives, our history, our relations with the planet and the other people and living things upon it. In some ways, Willis Harman and A.H. Maslow seem our best instructors in this area, as the quotations from them in the lead article make clear. Certainly people who have undertaken to work for either social or moral change in our time need to study these two writers. For one thing, it is necessary to get past the obstacles to change set up by obsessional leaders who give the impression of having certainty and knowing exactly what to do. How are large bodies of people weaned of their admiration and loyalty for such leaders? Teach them maturity is an obvious answer, but who knows how to do that? Herbert Kohl and Bayard Rustin gave part of the answer, which involves traveling on a long, slow road, but that road, as Arthur Morgan said, may be the shortest way home. (See his best book, *The Long Road.*)

Then, in Review, Grossman's discussion of a fresh way of thinking about medicine—his clarification of some of the deceptions in medical orthodoxy, his showing of how medical practitioners are broadening their background and opening their minds, finding good in practices once thought to be quackery—we obtain natural ways of redefining the meaning of orthodoxy and realizing that when methods of healing become merely habits, they may be off the track of understanding human needs. Grossman's book is a strong influence toward restoring responsibility to the individual. This is a central aspect of the transition in thinking the twentieth century is going through. Our survival—if we think survival has great importance—probably depends upon our success in this transition.

Responsibility in relation to our children—what sort of education would be best for them—is part of the same great task. A world which distracts and cuts us off from such decisions, leaving them to institutions, is not a world fit for human beings to live in.

Finally, we need to realize that a large part of the world, as it now exists, condemns the people who have their homes there to subsist on the leavings of the prosperous and well-to-do. This means that we must now begin to take responsibility for others besides ourselves. How to do this intelligently lies before us as another major project.

CHILDREN
. . . and Ourselves

ONE-TO-ONE TEACHING

A LETTER from a reader—a reader who is a teacher who works with disabled children in their homes—brought us the name of a book which we promptly got from the library and read, with increasing enthusiasm for what it says. The book is *Teaching One Child,* by Ernest Siegel, published in 1972 by Educational Activities, Inc., Freeport, New York. We don't know if it has been kept in print, but a good library should have or be able to get it. Parents who are thinking about teaching their own children, and all those who intend to be teachers of one sort or another, should read this book, which has great and lasting value.

The author says in his Foreword:

> September, 1951. That's when it all started. I began teaching homebound children—children who were too handicapped physically or emotionally to attend school and who had to receive their instruction at home. My previous experience consisted of student-teaching and then teaching in regular public school classes, but now I would be working with one child at a time.
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> In the early part of my career as a teacher of home instruction, I made a most remarkable discovery. Looking back now, I am sure that it must have come about gradually. Based upon the feedback data from having taught and observed my "class" of individuals and from discussions with some of my colleagues, an idea germinated, then grew almost imperceptibly, but the total impact was one of sudden realization: Given a child who *can* learn (that is, one whose physical or intellectual limitations are not so grave as to interfere with learning) and who *wants* to learn (that is, a child who is emotionally "tuned in" to learning), he can often progress faster with three to six weekly hours of individual instruction than he would in the customary thirty hour school week!

One might go from this "sudden realization" to the thought that parents actually *owe* it to their children to become their teachers. Who has the right to condemn to what adds up to years of wasted time the children he or she has brought into the world? And if the world doesn't give us the time to devote to the coming generation, then perhaps we ought to change the world around until it does. Mr. Siegel does not recommend abandoning classroom schooling—its value lies in socialization, he says. But parents who have now begun to teach their children at home usually find ways to overcome this lack, if it is a lack. Often the schools are glad to cooperate, so that children can participate in group activities such as playing instruments together, taking part in plays, and other social undertakings. In small communities, socialization seldom becomes a problem. Moreover, some kinds of socialization may best be avoided.

After a long list of the advantages in one-to-one instruction, Mr. Siegel says:

> It is often said that the best way to learn to teach is by teaching! But there is a vast difference between teaching small groups of children (individualized instruction) and teaching one child (individual instruction). Even in those instances in which the teacher attempts to tutor a single child in the midst of a classroom of other children, there are still many factors which will militate against the development of optimal pedagogical skills: the periods of one-to-one instruction are too short, there are too many distracting elements, there frequently is no opportunity to complete the individual child's lesson, and the responsibility towards the other children drastically diminishes the teacher's sense of priority and continuity regarding the individual child. These factors are virtually non-existent in instructional settings in which the teacher can devote his *full* attention to the individual child. . . .
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> Now the notion of a parent teaching her child is not nearly so far-fetched as it might seem. If a mother reads a story or recites a nursery rhyme to her child, isn't this teaching? Which mother has not motivated her child in memorization and communication by reciting a line, omitting the last word? (Incidentally, this educational technique, which parents do instinctively, is quite sound pedagogically.) Don't parents usually praise their children's efforts in such activities as talking and walking? This, too, is a necessary component of good teaching. Even coaching such basic self-care skills as eating, dressing, and toileting are essentially

> educational. . . . The question of whether parents, in general, *should* teach their children is, in essence, a pointless query. The fact is that many parents *do*. One purpose of this book is to give all persons who teach one child at a time—and this includes parents—some means of becoming more effective in their teaching role.

This book is filled with illustrations of teaching problems, children's tricky ways of avoiding making an effort to learn, and suggestions of how to overcome them. There is also a lot of good counsel on teacher's attitudes, for example:

> Suppose in the course of a phonics lesson, the teacher says, "We have talked about the letter *'A.'* What is the next vowel on our list?" The child answers, *"B."* The teacher has two choices. He can say "No, you're wrong," or he can say, "That's a good answer. I know why you said it. *'B'* does come after '*A.*' However, in today's lesson, we are talking about only the vowels. . . . " The second approach is the appropriate one. The teacher lets the child know that he "digs" him, and in so doing takes the sting out of a "wrong" answer. (This example was selected for illustrative purposes; it demonstrates rather clearly the advocated principle of identifying the thinking process which led the child to the incorrect answer and letting him know that his response is not devoid of merit. In this example, the reason the child answered *"B"* is rather obvious, and most classroom teachers would certainly surmise why he made the error. There are many instances, however, in which an incorrect answer's etiology is not so obvious, but is locked-in to an individual's idiosyncratic experiences and interests, a particular thinking style such as a concrete language pattern or egocentricity, or the child's socio-economic milieu. In these cases, it is imperative that the teacher know the child as an individual.)

Teachers can learn a lot from this book:

> Often a teacher develops a preconceived idea that there is only one correct answer, the one he wants the child to say, and automatically—often, not too critically—rules out all the others. Holt (in *How Children Fail*, 1964) cited an example of a child who made up the sentence, "I had a dream about the Trojan War," believing that the word "dream" can be a verb since it can illustrate action (the Trojan War does depict considerable action!). Without any explanation, the teacher told him he was wrong. She made three errors in this brief episode: she told the class that a verb *must* express action, she forgot that the word "dream" can be used as a verb, but her most serious error was in not grasping what the child was saying and thinking, thus leaving him bafffled and frightened. The experience of teaching and observing one child at a time, particularly the opportunity to mull over a "wrong answer," may lead the teacher away from a rigid, dogmatic, "only one correct answer" mental set and reciprocally towards really listening to the child.

In his last chapter, on teaching well, after review of some of the difficulties and obstacles, by no means the fault of the teacher, Siegel concludes with a story about a farmer plowing his field.

> The soil is pebbly, the terrain unlevel, the plow rusty and dull. He struggles valiantly, doing the best he can under the circumstances. Along comes a young government worker from the Department of Agriculture. He approaches the farmer, points out the inefficiency of his methods, and offers to let him have a government booklet which will provide him with many new ideas about farming.
>
> "Hell," replies the old man, "I ain't farming half as well as I already know how to!"

There are other relieving flashes of humor in this worthwhile book.

FRONTIERS

Tropical Farming Project

COSTA RICA, a republic of Central America, with some 23,000 square miles, lying between Nicaragua and Panama, largely an elevated table land of from 3,000 to 6,000 feet above the sea, was discovered by Christopher Columbus, and probably named by him, on his fourth and last voyage to America. It became an independent nation in 1821 and has had a history less troubled by revolutionary upsets than most Latin American countries. Its government has had the reputation of reliability and responsibility, with a judiciary independent of the executive, with less illiteracy than any other land in Hispanic America, ranking among the leading nations of the world in public education. The exports, through the years, have been bananas, coffee, and cacao.

We give attention to Costa Rica by reason of a letter we have received from ANAI, a group active in the cantón or county of Talamanca, a lowland area of about a thousand square miles at the southern end of Costa Rica, with a humid climate. The active members of the group, William O. McLarney, James R. Lynch, and Robert B. Mack, are concerned with improving the lives of the small landholders of this region of Costa Rica, and have established an experimental farm there, which began with a piece of land Bill McLarney bought for $500 some ten or twelve years ago, which he began working with a machete. McLarney, some readers will remember, was associate and co-founder with John Todd of the New Alchemy Institute on Cape Cod. Both these men are marine biologists. Todd worked on Cape Cod, on the Institute's farm, to develop gardening methods and housing for small farmers and communities, using high technology in "intermediate" ways. He is now working to spread the use of sail-powered fishing vessels (trimarans) by fishermen of the coastal areas of South and Central America and the Pacific Rim. McLarney settled in Costa Rica to work with the *campaseinos* in the lowland tropics to help them develop a sustainable agriculture in one of the most fragile environments on the planet, using the results of scientific research carried on in the U.S., Costa Rica, and elsewhere.

The letter by ANAI says:

> Bill began in Talamanca by experiencing at first hand the hardships encountered by farmers in lowland villages lacking roads, electricity or medical services, and we remain a village-oriented institution. By tempering our theories and optimisms with the patience and endurance of the people who live "off the highway" and outside the mainstream economy, we hope to play a role in developing real solutions for real people.

While Talamanca is sparsely populated, Costa Rica has already experienced some of the population overflow from neighboring nations in Central America where increasing violence and civil war have made it unhealthy to stay. The isolation of the Talamancan *campesinos*, while in some ways an advantage, has made them vulnerable to the sudden changes going on about them in their region of the world. The letter says:

> Talamanca is in many respects a microcosm of the lowland tropics. Biologically, it is astonishingly diverse compared to anything most of us are familiar with in the temperate zones. Yet, as elsewhere in the tropics, many of its soils are unusually fragile. Talamanca is also diverse in its human population, which comprises Spanish-speaking mestizo people from all parts of Costa Rica and other Central American countries, English-speaking black people with West Indian roots, and two Native American tribal groups, each with its own language. As a result of both natural population growth and immigration due to environmental and political problems elsewhere in Central America, and with the aid of new highways, their numbers are growing as never before. Traditional ("slash-and-burn") agriculture, which is appropriate when population density is low, and which has been increasingly employed to meet survival needs since the monilia pod rot disaster [affecting cacao trees] must yield to systems emphasizing perennial crops if Talamanca is not to become a casualty in the struggle affecting virtually all tropical areas. . . . *The task at hand is to capacitate people to take advantage of new opportunities as their isolation diminishes.*

ANAI, in short, has appealed for help with funds. They are looking for gifts of $15, $25, or even $100 to finance their experimental and practical undertakings. Such gifts are tax deductible. Checks should be made to ANAI, Inc., and sent to 1176 Bryson City Road, Franklin, North Carolina 28734. It seemed appropriate to repeat this appeal here since the U.S. has so much responsibility for the troubles in Central America, and ANAI is working on a long-term solution for the common people of that area. What is true of the peasants in Costa Rica is true of all the small landholders in Central American lands.

What do the ANAI people do? (They now have a staff of ten.)

Our efforts to date include:

> Field testing of over 100 species of crop plants, including food, spice, medicinal, nitrogen-fixing and lumber crops for sale and home use. This project, carried out jointly with the cantonal farmers' cooperative, Coopetalamanca, provided Talamanca farmers with several new cash crops to complement the precarious monoculture of cacao which sustained them economically until a disaster brought on in 1980 by monilia pod rot disease.
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> Further application of the results of our diversification work through a community nursery project involving all of Talamanca's 25 principal communities and the regional high school. All work, from planning to marketing, is done by the farmers themselves, with technical assistance from ANAI.
>
> Adaptation of the Oriental concept of integrated fish/livestock culture to the environment of Talamanca, as a source of protein for home consumption. We are seeking to extend this work, thus far confined to our home community, throughout the 1,000 square miles of Talamanca cantón.
>
> Establishment of a sanitary drinking water system in our community, resulting in a marked decrease in intestinal parasites. The technology remains with the community, ready for transfer to other communities.
>
> A new project aimed at securing legal title for farmers in our and neighboring communities, while at the same time setting up a community-managed wildlife refuge in what is considered to be the most ecologically significant area remaining unprotected in Costa Rica. . . .
>
> Our community projects, spread throughout the 1,000 square miles of Talamanca, are what attract most of our financial support. Even they are under-funded, but the very core of ANAI's existence, our farm, has always struggled along virtually unfunded. Most of the financial resources to operate it are at this time being subtracted from our own salaries. The farm, located where the alluvial Sixaola Valley merges into hill country, comprises about 150 hectares of forest and agricultural land. Almost half the land is in virgin tropical forest, with some species not known elsewhere in Central America. This area is managed as a community-managed wildlife refuge. Most of the rest is devoted to experimental crops, plus an integrated aquaculture-livestock system, which together form the basis for our diversification work.

Plans for the future include expansion of the experimental program to include development of cacao in disease-resisting varieties, laurel (not the shrub known in North America) for lumber, nutmeg, an ideal crop for the area, several choice Asian fruits and nuts, and assorted high quality lumber trees, as a long-term "insurance" crop. Markets exist for all such crops which can be grown best by small farmers. All they lack is information and example.