

THE ONLY ALTERNATIVE TO POWER

NORMAN COUSINS' most recent book, *The Pathology of Power*, published this year by Norton at \$15.95, is a valuable book in terms of his intentions, but it may be made even more valuable by going beyond his intentions, showing what kind of social organization will make war impossible. What sort of social organization is that? It is one without the power to coerce, to threaten, or to harm—a state, that is, which is no state at all, in terms that we are familiar with. How can we evolve a state like that?

This can be done only step by step, by seeing how well we can get along without it, and finally having it perform those few remaining functions that are useful and have no relation to power. They would, we suppose, be coordinating functions and suppliers of information of various sorts. How would we begin to move in this direction?

A movement of this sort has already happened and is under way. It is described by Peter Berg in an article, "A Life-Place Politics," in the Summer 1986 issue of *Raise the Stakes* (published tri-annually by the Planet Drum Foundation, P.O. Box 31251, San Francisco, Calif. 94131). He says:

More environmental agencies won't ultimately relieve our situation. They would only be further appendages of a political core that is welded to industrialism itself. We need a core based on the design of Nature instead, from watershed to bioregion and continent to planetary biosphere. Is it self-defeating to avoid established governments other than immediately local ones? Not if we want to anticipate a society whose direction already lies outside those institutions. We need to uncover and follow a natural design that lies beneath industrial asphalt.

The push that is needed to persuade people to begin thinking seriously in this direction may be found in Norman Cousins' analysis of what power does to the human beings—not bad men, but ordinary human beings—who have access to it and believe they know how to use power for a good purpose. Early in *The Pathology of Power* Mr. Cousins tells about the decision which confronted

President Truman when he learned that the test of the atom bomb in the desert proved it would work. Almost to a man, the military leaders of the nation counseled against its use on the Japanese. The Japanese, they said, were on the verge of defeat and knew it, and were quietly appealing for peace. Eisenhower was very much opposed to using the bomb on Japan. In his diary, Truman noted that the entry of the Soviet Union into the war against Japan would have been enough to make them surrender. But as Cousins says: "Yet President Truman, in reporting to the American people about his decision to use the atomic bomb, unequivocally declared that Japan was far from defeated at the time and that, were it not for the atom bomb, hundreds of thousands of American lives would probably have been lost in the invasion."

Obviously, both assertions cannot be true. The president's private journal and the military records attest that Japanese surrender was near; the president's public statements say the opposite. . . . What the American public had no way of knowing at the time was that most of America's military leaders were opposed to the decision to drop the bomb, believing, as Eisenhower's memoirs emphasized, that neither the bomb nor an invasion was necessary to defeat Japan.

Most people know that the scientists who developed the bomb were against its use on Japan. As Cousins says:

The scientists expressed their conviction that a unilateral approach to the dropping of the atom bomb, even apart from overwhelming moral considerations, would almost inevitably result in unilateral action by other nations. We would be undermining a possible common ground upon which common controls might later be built. As a corollary, we would be destroying whatever stand we might later decide to take on outlawing the use of atomic weapons in warfare. It would be naive to expect other nations to take such a plea seriously in view of our own lack of reticence in dropping the bomb when the war was on the very verge of being won without it. . . . for a brief moment at Potsdam, President Truman himself decided, as his

diary revealed, to move along these general lines—at least to the extent of issuing a warning or ultimatum to Japan. A parallel decision was that the bomb would not be used on a populous target. But these first impulses were put aside in favor of the arguments for using the bomb as a demonstration of America's power in the competition with the Soviet Union.

To summarize: President Truman's diary and the testimony of other officials reveal that just the fact of Russian entry into the war would have been enough to bring about Japan's surrender. The main objective, therefore, was to defeat Japan *before* the Russian entry. The original intention to issue a warning or ultimatum about the bomb was shelved because of the need to meet a deadline.

This is the unvarnished picture. It was not the picture that was presented to the American people, but it illustrates the tendency of power to sweep everything aside and cause even good men to go outside the traditions of a free society in justifying their decisions.

Human intelligence, directed toward a review of history, is in itself sufficient to make clear what happened in 1945, assuring the destruction of Hiroshima and Nagasaki.

Norman Cousins begins his book by quoting what Lord Acton wrote in a letter to a friend: "power tends to corrupt; absolute power corrupts absolutely." Acton realized, Cousins says, "that nations and civilizations fell into decline—not so much because they were powerless but because of their inability to use their power wisely." Cousins adds some further generalizations about power which are amply illustrated by Truman's decision to bomb Japan:

The tendency of power to drive intelligence under ground;

The tendency of power to become a theology, admitting no other gods before it;

The tendency of power to distort and damage the traditions and institutions it was designed to protect;

The tendency of power to create a language of its own making other forms of communication incoherent and irrelevant;

The tendency of power to spawn imitators, leading to violative competition;

The tendency of power to set the stage for its own use.

All these tendencies, in varying degrees, are observable in almost every breakdown of history. Thucydides' history of the wars that drained the lifeblood of ancient Greece Polybius' account of Macedonian errors; Gibbon's study of Rome's ascendancy and its slide from the center of the historical stage; the scores of books on Hitlerian might and disaster—all these works bear witness to the inability of highly organized societies to understand the complexities and perils of their power.

A little later in his book Cousins says:

Power has a way of victimizing its users. It tends to create a dark and subterranean world in which decisions affecting the life of a nation can be taken without reference to their moral implications or the obligations to inform people truthfully about issues of transcendent importance to their well-being and indeed survival. The power of the bomb was allowed to supersede the ultimate power of the American people.

The decision to drop the bomb in Hiroshima is a prime reflection of the idea—more than an idea, it is almost an article of faith—that the demonstration of power is a major function of foreign policy. The dangers inherent in such a policy become explosive when other nations hold to the same idea.

What becomes evident is that these dangers cannot be controlled or eliminated without ordinary individuals who will free themselves of feeling responsible to national authority. This means individuals who grow up in families who realize that the national state cannot be trusted, that the pressures toward anti-human action are too great for any executive to be placed in a position of power that Truman achieved, simply by being a vice-president who succeeded to that position. The spirit of such families was well put by Thoreau in *Civil Disobedience*:

Can there not be a government in which majorities do not virtually decide right and wrong, but conscience?—in which majorities decide only those questions to which the rule of expediency is applicable? Must the citizen ever for a moment, or in the least degree, resign his conscience to the legislator? Why has every man a conscience, then? I think that we should be men first, and subjects afterward. It is not desirable to cultivate a respect for

the law, so much as for the right. The only obligation which I have a right to assume is to do at any time what I think right.

Then, at the conclusion of this essay, Thoreau said:

There will never be a really free and enlightened State until the State comes to recognize the individual as a higher and independent power, from which all its own power and authority are derived, and treats him accordingly.

Such a state may seem hard to imagine, by contrast with the kind of states that we have now, yet the existing states, if we consider them in the light of the *Pathology of Power*, have already become intolerable from any moral point of view. Even if they cannot be abolished by presently available means, the means that Thoreau found available still exist and his arguments have only gained in validity during the passage of time.

Meanwhile, the practical steps taken by the bioregionalists are an available means of increasing the responsibility of individuals, and of freeing them on a step-by-step basis of the need for a national state. These are considerations toward which *The Pathology of Power* points.

Other chapters in Norman Cousins' book have the effect of reinforcing the conclusions we have set forth. He writes about what happened to Hiroshima, which he visited in 1949. He begins by showing that the death toll of the atom bomb came closer to 175,000 than "the 75,000 figure repeatedly used by the United States."

I stood at the spot which was believed to mark the center of the atomic explosion. Directly in front of me were two fairly thick and round stucco columns or gateposts on a very small plot raised about one foot off the ground level as a marker and memorial. These columns were all that was left of a hospital, directly under the atomic burst. A new hospital had been built right in back of the old gateposts. It was a two-story affair, painted white. Patients waved to us from the windows.

As I stood at the center of the atomic explosion, it was difficult to describe the things I felt. Here, only a few years earlier, there was a flash of heat which at the split second of fission was many times the surface temperature of the sun. And suddenly, even before a

stop watch could register it, the heart of the city was laid open with a hot knife. I talked to dozens of people who were in it—dozens who were crippled and burned and suffering from diseases of radioactivity—and the story was very much the same. The sudden flash of light brighter than the morning sun, much more intense than any light ever seen before on this earth. If you lived through that second, you found that your clothes were on fire, and you rushed out into the street and ran, for everyone else was running, trying to run somewhere. Then someone yelled, "Run for the river!" and you threw yourself into the river and thousands of others did the same thing and you wondered what happened to your family, to your children or your parents. . . .

This then was Hiroshima in the first hours of the Atomic Age. It was something new in the solar system—getting at the heart of matter and ripping it apart, causing the smallest units of nature to smash each other and set off a flash as though a piece of the sun itself had broken away, and sending out strange rays that went through the bones and did things to the composition of human blood that had not been done before or dreamt of before.

Mr. Cousins did what he could to help Japanese couples who were trying to care for orphaned children. Before he left he asked the mayor of Hiroshima, Shinzo Hamai, if there was anything that could be done for him in the United States. Hamai thought for a while and then wrote out a message to Americans which began:

There is much I would like to say to America. First of all, I would like to thank those Americans who have helped us to bring a dead city back to life.

It is not my place or purpose to try to tell Americans what ought to be done. But what I can do is to tell them about what will happen to the world's cities if something is not done to stop war. The people of Hiroshima ask nothing of the world except that we be allowed to offer ourselves as an exhibit for peace. We ask only that enough people know what happened here and how it happened and why it happened, and that they work hard to see that it never happens anywhere again.

We are able to appreciate the mayor's meaning yet at the same time realize that horror stories do little to prevent human beings from making war. It is the recognition of the dignity of man—of all human beings—which generates the resolve to oppose war,

to take no part in it, and to encourage others to begin to think along these lines. We need populations who are simply unable to take the lives of other human beings—people like Thoreau, like Tolstoy, like Gandhi, and the thousands more who have followed their example.

This is the sort of thinking we need, and it is not about war or the horrors of war, but about the meaning of being human. It is enough to persuade us of this to read the first few paragraphs of the Foreword to Mr. Cousins' book by George F. Kennan. He says at the beginning:

When the first nuclear weapon was exploded over Hiroshima, and in the years immediately following, a number of weighty and impressive voices could be heard, pointing out that the emergence of destructive power of this magnitude invalidated the greater part of traditional thinking about the relationship of war to national policy and calling for the adoption of a new mindset—a new way of looking at things, one based on the recognition that war was no longer a rational option for great industrial powers and that other means would have to be found to resolve the conflicts of interest that would always be bound to arise among them.

In some instances, these demands came from the great intellects of the day. Those of Albert Einstein and Bertrand Russell are well known, and have frequently been republished. Less well known are those of certain of the military leaders, particularly those mentioned in this volume—Generals Douglas MacArthur and Dwight Eisenhower (others, notably Lord Mountbatten, might also have been cited). All of these men perceived the suicidal quality of the nuclear weapon and the danger in allowing it to become the basis of defense postures and the object of international competition. All of them spoke with a great sense of urgency. All went to their deaths hoping, surely, that their warnings would not fall on deaf ears and that a new generation of leaders would recognize that we were all living in a world of new political-strategic realities and would draw the necessary conclusions.

Unfortunately, this has not happened. For thirty years past these warning voices have been disregarded in every conceivable respect. There has been no new mindset. There has been no recognition of the revolutionary uniqueness of the weapons of mass destruction—no recognition of their sterility as weapons, no recognition of the dangers of their

unlimited development. On the contrary, the nuclear explosive has come to be treated as just another weapon, vastly superior to others, of course, in the capacity for indiscriminate destruction, but subject to the same rules and conventions that had governed conventional weaponry and its uses in past ages. The suicidal quality of these devices has been ignored. . . . People have gone on, in other words, behaving as though this were 1916 instead of 1986 and as though the nuclear weapon were only some new species of artillery. This was, of course, precisely what the Einsteins and the Eisenhowers and the others had tried to warn about.

Kennan goes on to point out what an enormous business the military-industrial establishment has become, constituting "the greatest single purchaser in the American market, with all the power that implies," leading him to the conclusion that—

Were the Soviet Union to sink tomorrow under the waters of the ocean, the American military-industrial complex would have to go on, substantially unchanged, until some other adversary could be invented. Anything else would be an unacceptable shock to the American economy.

Meanwhile a practically fraudulent "normality" has proceeded, with "Summit meetings, the façade of normal diplomatic relations, cultural and scientific exchange programs, a little trade (where demanded by some domestic-political lobby), and a modicum of peaceful tourism: these have been permitted to proceed with at least a pretense of normality."

But back of them all the machinery of the great military establishment, and above all of the related intelligence and internal security systems, has ground along in its own ponderous, relentless way, largely remote from political observation or control, basing itself daily on working assumptions that could not have been much different had one known with a certainty that all-out war with the Soviet Union was both inevitable and impending. To which fact has to be added the recognition, so simply supported by historical example, that to believe a war to be inevitable, and to act accordingly, is the best way to make it so.

Only a Thoreau, a Tolstoy, a Gandhi, has an answer to a situation like that.

REVIEW

SOME HEROIC ADVENTURES

FOR following the text of David Robie's *Eyes of Fire* (New Society Publishers, paperback, \$9.95), a goodsized map of the Pacific Ocean is a practical necessity. Robie's title is taken from an American Indian legend in which a grandmother who had this name prophesied that the Warriors of the Rainbow would save the earth after the white people had poisoned the waters and slaughtered all living things. The book is about the extraordinary career of a trawler acquired and reconditioned by Greenpeace people in England in 1977. They named the ship *Rainbow Warrior* and developed a crew made up of both men and women, one of the ladies being an engineer. They also acquired four inflatable speed boats which they used in sometimes successful attempts to frustrate the harpooners of whales. They also opposed dumping radioactive wastes into the sea and the hunting of seals. Their methods were daring but nonviolent. Robie remarks that in a campaign against the slaughter of harp seals on the east coast of Canada, "Crew members were arrested for dyeing seal pups' coats green to make them commercially worthless."

In 1985 the *Rainbow Warrior* undertook to relocate the people of Rongelap Atoll in the Marshall Islands where, in 1954, the United States had set off a thermonuclear explosion, sickening the population with radiation illness. Tumors and leukemia were some of the results. While the Atomic Energy Commission called the explosion a "routine atomic test," most inhabitants of the island suffered burns on their ears, necks, and feet, and their eyes were painful. Many lost their hair. Exposed women had miscarriages and stillbirths were common.

In 1979, more than two decades after Rongelap was declared safe, the Department of Energy completed an aerial radiation survey of the northern Marshalls, including Rongelap and Bikini Atolls. The survey found that several of the northern islands of Rongelap were more heavily contaminated than

parts of Bikini. Early the next year, scientists went to Rongelap and told the people the northern islands—vital for food gathering and copra production—were too radioactive to visit.

The people of Rongelap finally realized that if their children and grandchildren were to have a fair chance for health, they would have to migrate to another island. There was no money for such an adventure, so that eventually Greenpeace was asked to help. Greenpeace agreed and *Rainbow Warrior* was dispatched to do the job. The ship was docked in Jacksonville, Florida, and there the crew stepped in masts and refitted the ship as a sailing vessel. After some sea trials the ship took off for the Bahamas, then sailed from Nassau to Panama, then going on to Honolulu. At Diamond Head Fernando Pereira came on board to photograph the ship under sail and he later became a member of the crew. On the way to Rongelap the *Warrior* stopped at Majuro, an island near Rongelap. "Greenpeace and New Zealand are doing good things—standing up to the Americans," said a feisty Majuro shopkeeper. "We want to be nuclear free."

When the islanders on Rongelap—about 350 in all—saw the *Warrior* sail into sight they accepted that they were really going to have help moving, and they joyously welcomed the captain and crew, who came ashore. They planned the move in several trips to Mejato, a much smaller island where there had been little or no radiation, carrying first the old and the pregnant women. Mejato was uninhabited and while lush, uncultivated, so that food would be a problem, although fish were plentiful. The *Warrior* sailed back and forth, carrying people and building materials which had been knocked apart on Rongelap. When the job was complete, it was Pereira's birthday. He had joined the crew and was presented with a hand-painted T-shirt labelled "Rainbow Warrior Removals, Inc."

Leaving Majuro was an emotional wrench. Many of the crew wanted to remain on the island, help build houses and get the generators going. Andy Biedermann (a crewman) wanted to do more for the

ill; he had found evidence of tuberculosis among the children. But they realized they had accomplished all they could for the moment and there was still the rest of the Pacific campaign ahead.

Of the Rongelap evacuation, Robie muses:

The exodus seemed to open a whole new chapter for Greenpeace: the importance of humanitarian missions as an integral part of the environmental campaigns.

"This dark secret of American nuclear history has been exposed to the rest of the world," [director of Greenpeace Netherlands] said. "The fact that the Rongelap people were forced to leave their home 31 years after being contaminated by fallout is probably the most graphic and tragic statement that can be made in support of the abolition of nuclear weapons from the face of the earth."

The eco-navy of Greenpeace was born in 1971 when a little "floating farmhouse" left Vancouver for the Aleutian Islands in order to block, if they could, a five-megaton nuclear test by the United States. On board were a collection of Canadian ecologists, journalists, lawyers, and hippies. The sponsors later became the Greenpeace Foundation. The voyage, as a protest, was a failure, since the blast went off before they arrived, but Robie says that as a public relations campaign "it was a brilliant success and the Atomic Energy Commission abandoned the rest of the series." Other ships staged protests against the detonation of French nuclear bombs in the Pacific area.

Greenpeace had scored two early environmental successes—both in the Pacific. As the popularity of the fledgling ecology movement swelled, small groups were begun in several countries in a loose coalition under the Greenpeace banner. Campaigning spread from nuclear tests to other conservation issues. The "human barrier" technique was developed as Greenpeace inflatable speedboat crews defied harpoons, forcing Soviet whaling fleets to abandon operations off California. In anti-sealing campaigns on the Laborador Ice Pack, protesters risked arrest and being plunged into icy water to save snow-white pups from being clubbed to death for the fur trade.

The philosophy of non-violent, direct action emerged as a powerful weapon for conservation. Life

had to be saved by what the Quakers call "bearing witness." A person bearing witness must accept responsibility for being aware of an injustice. That person may then choose to do something or stand by but may not turn away in "feigned" ignorance. The Greenpeace ethic is not only to bear witness personally to atrocities against life, it is to take direct action to prevent them. Although action must be direct it must also be nonviolent.

One early vessel of the eco-navy was the *Vega*, skippered and owned by David McTaggart, a Canadian. The *Vega* was rammed by a French minesweeper in the Pacific and had to be towed to an island for makeshift repairs. Robie says: "Photographs and news of the brutal beating up of McTaggart and English crewman Nigel Ingraham made world headlines." New Zealand's protests forced Paris to do only underground testing in 1975. In 1977 McTaggart began unifying Greenpeace, which was just a loose collection of local groups, into "a multinational ecology group." Meanwhile, the French had decided that McTaggart was conducting a personal vendetta against France by reason of the mistreatment he had received. He denied this but the French were not convinced.

In July of 1985 the *Rainbow Warrior* berthed at Marsden Wharf in Auckland, and the crew was glad of a rest. A few days later, close to midnight, a few of them were in the mess talking when an explosion shook the vessel and the 418-ton ship shuddered. This was the first of two limpet mines planted by French frogmen. The sea poured in and the captain ordered everyone to abandon ship. Pereira went to his cabin to save his camera equipment, but then came the second explosion and also a flood of water which drowned him. The ship was beside the pier and did not completely sink, but was ruined beyond repair. Detective work by New Zealand and the crew of the *Warrior* gathered evidence that the limpet bombs had been placed by operatives of the French secret service, which, two months later, the French government was obliged to admit. Robie gives a complete account of how the French guilt was established. He then says:

Greenpeace made a vow to continue the fight for a nuclear-free Pacific. The five world directors of the organization held a telephone conference and resolved to carry on the campaign with the Vega leading the fleet.

"If they wanted to intimidate us by killing one of our people it will only increase our resolve," Dr. Patrick Moore one of the directors, said. "They've got no satisfaction from their act of terrorism." (He wasn't quite sure who they were at that stage.)

The *Auckland Star* declared editorially:

With an irrationality that is impossible to fathom, (mad bombers) have struck at crusaders whose tactics have always been non-violent, whose aims have always been to preserve and enhance life on our planet in campaigns ranging from saving endangered whales to opposing nuclear weapons testing.

The Greenpeace organization has always found a soft spot in our national heart, pursuing, as it has, the campaign against French testing in the Pacific, which we as a nation led a decade ago with the dispatch of a frigate to the testing grounds.

But even as terrorist acts go, this must count as one of the most pointless. To blow up a boat dedicated to putting peace back into the Pacific is not going to win any friends for the perpetrators. Just the opposite.

All readers of David Robie's book will agree.

COMMENTARY

INTERNS FOR THE LAND INSTITUTE

WE have from the Land Institute (0440 E. Water Well Road, Salina, Kansas 67401) an announcement of the continuing educational program of ten internships in sustainable agriculture, lasting from February to December of the calendar year. Each student receives a stipend of approximately \$95 a week for living expenses. Students find their own housing and provide their own meals. They study and discuss assigned readings during the morning and do physical work on maintenance and research projects in the afternoon. In a letter Wes Jackson, director, says:

Agricultural research at The Land is very different from that going on in most programs. The conventional emphasis on high production, almost at all cost, has contributed to soil erosion, pollution of groundwater from agricultural chemicals, genetic narrowing of our crops, low commodity prices, and the loss of family farms and farm communities. We stress the overall sustainability of an agricultural system rather than high production. We conduct experiments to determine the feasibility of an agriculture which uses the prairie ecosystem as an analogy but with an emphasis on producing seeds.

At present The Land Institute has about 250 acres used to carry on experiments. Students work in a building containing classrooms, library, offices, kitchen, and a solar greenhouse. Solar collectors and wood burning stoves provide space heat, and two wind machines generate electricity for the building. Two large barns house a shop, seed threshing and cleaning equipment, and field machinery. A new research greenhouse is being constructed south of the office building.

The Land Institute is a non-profit, educational research organization established in 1976 along the Smoky Hill River southeast of Salina, Kansas. The Land offers a unique graduate-level curriculum for students, serves as a center for the study of environmental/agricultural issues, and conducts pioneering research into the development of a sustainable agriculture based on the model of the prairies.

What is "sustainable agriculture"?

Most agricultural research is production-oriented. But high-yield agriculture, based on annual monocultures, discounts the long-term ability of the land to produce food. Research at The Land Institute emphasizes a sustainable agriculture based on the prairie as a model, one less dependent upon fossil fuels and chemicals, one more conserving of water and soil. On almost any tilled, sloping field, one can see soil erosion. Some farmers try to stop it by rotating crops, building and maintaining terraces and laying out fields in strips. Such good husbandry is the best we can do with till agriculture, and it is commendable. In the long run, however, we could find a solution to soil erosion based on the principles of nature's ecosystems. The prairie is a regenerative system which features perennials in polyculture.

Currently, all our plant breeding and ecological studies are directed toward answering four questions: (1) Can perennialism and high seed yield go together? (2) Can a polyculture of perennials maintain itself through nitrogenfixation and solar energy? (4) Can such an ecosystem control weeds and avoid epidemics of insects and pathogens?

Applicants for internships at the Land are invited to write a letter giving past academic and job experience, major interests, and goals for the future. The applicant should tell about his or her involvement in agricultural, environmental or energy issues and books read on sustainable agriculture. Candidates should be graduates or upper level undergraduates. Good health and stamina are important. Special consideration will be given to those interested in working for graduate degrees and in working as professionals in the area of sustainable agriculture. Applications should be in by December 1, 1987.

The announcement says:

Agriculture interns are an important part of the sustainable agriculture research program. They start experiments in the spring, tend to them all summer, harvest and clean seed in the fall, then record and analyze data. Students write papers on research results for publication in *The Land Report Research Supplement*.

CHILDREN ... and Ourselves LEARNING FROM HOLT

HAVING run out of material for this Department, we went back to an old book we reviewed years ago—John Holt's *How Children Learn* (1967), and flipped through the pages finding ideas we didn't even remember. Then we went to his Preface and happened on this:

I believe, and try to show here, that in most situations our minds work best when we use them in a certain way, and that young children tend to learn better than grownups (and better than they themselves will when they are older) because they use their minds in a special way. In short, children have a style of learning that fits their condition, and which they use naturally and well until we train them out of it.

A little later he says:

The human mind, after all, is a mystery, and, in large part, will probably always be so. It takes even the most thoughtful, honest, and introspective person many years to learn even a small part of what goes on in his own mind. How, then, can we be sure about what goes on in the mind of another?

In the body of the book he tells about something called "balance beams" developed by his friend, Bill Hull, another teacher. Hull, he says, was trying to get his children to use them—a balance beam is a piece of wood balanced at its midpoint, with places along the arms to put weights—to figure out the principles of the beam, so that, whatever the weight put on one side, they could balance it with weights on the other. But the idea didn't seem to work very well. The children couldn't seem to get the idea. They didn't, Holt said, because it was "our problem they were working on, not theirs."

Two years later he tried it again, borrowing some beams from Hull.

Then I had a piece of undeserved good luck. Before I had a chance to do any talking or explaining about these beams, some children came in early one morning and saw them. "What's that stuff?" they

said. I said, "Oh, some junk I got from Bill Hull." They said, "What's it for?" I said, "Nothing special; mess around with it if you want to." Three or four of them went down to the end table and began to fool around. As other children arrived they went down to watch. By half-an-hour later, almost all the kids who had been working with the beams knew how to work them—including some who were not good students. I gave one of them one of the problems that had in earlier years given very able students so much trouble. She solved it easily and showed that she knew what she was doing. I said, "You have any trouble figuring that out?" She said, "Oh, no, it was cinchy."

Holt tells another story to explain why. Hull and some other teachers designed some play blocks of various colors and sizes which could be used to do a lot of things with the children solving little problems which experts had said they couldn't do. In developing these blocks, Hull and the others found "a very interesting thing about the way the children reacted to these materials."

If, when a child came in for the first time, they tried to get him "to work" right away, to play some of their games and solve some of their puzzles, they got nowhere. The child would try to do what he was asked to do, but without joy or insight. But if at first they let the child alone for a while, let him play with the materials in his own way, they got very different results. At first, the children would work the pieces of wood into a fantasy. Some pieces would be mommies and daddies, some children; or they would be houses and cars; or big animals and little animals. Then the children would make various kinds of patterns, buildings and constructions out of the pieces of wood. When, through play and fantasy, the children had taken these materials into their minds, mentally swallowed and digested them, so to speak, they were then ready and willing to play very complicated games, that in the more organized and businesslike situation had left other children completely baffled. This proved to be so consistently true that the experimenters made it a rule always to let children have a period of completely free play with the materials, before asking them to do directed work with them.

Here John Holt quotes a little from David Hawkins, who has done an article: called "Messing About," which is an essential part of teaching children—the time given simply to

getting acquainted with an object or tool or some kind of learning instrument. As Hawkins says:

Children are given materials and equipment—*things*—and are allowed to construct, test, probe, and experiment without superimposed questions or instruction. I call this phase "Messing About." . . . In starting this way, I for one, naïvely assumed that a couple of hours of "Messing About" would suffice. After two hours, instead, we allowed two more and, in the end, a stretch of several weeks. In all this time, there was little or no evidence of boredom or confusion. Most of the questions we might have planned for came unscheduled.

Why did we permit this length of time? First, because in our previous classes we had noticed that things went well when we veered toward "Messing About" and not as well when we held too tight a rein on what we wanted the children to do. It was clear that these children had had insufficient acquaintance with the sheer phenomenon of pendulum motion (our subject) and needed to build an apperceptive background, against which a more analytical sort of knowledge could take form and make sense.

Hawkins' explanation of his point now grows abstract, but worth quoting, as Holt recognizes, because with abstraction it grows in depth and content.

This (Messing About) phase is important, above all, because it carries over into school that which is the source of most of what children have already learned, the roots of their moral, intellectual, and esthetic development. If education were defined, for the moment, to include everything that children have learned since birth, everything that has come to them from living in the natural and the human world, then by any sensible measure what has come before age five or six would outweigh all the rest. When we narrow the scope of education to what goes on in schools, we throw out the method of that early and spectacular progress at our peril. . . . To continue the cultivation of earlier ways of learning, therefore; to find *in school* the good beginnings, the liberating involvements that will make kindergarten seem a garden to the child and not a dry and frightening desert, this is a need that requires much emphasis on the style of work I have called "Messing About." Nor does the garden in this sense end with a child's first school year, or his tenth, as though one could then put away childish things. As time goes on, through a good mixture of this with other phases of work,

"Messing About" evolves with the child and thus changes its quality. It becomes a way of working that is no longer childish, though it remains always childlike, the kind of self-disciplined probing and exploring that is the essence of creativity. . . .

If you once let children evolve their own learning along paths of their choosing, you then must see it through and maintain the individuality of their work. . . . Heroic teachers have sometimes done this on their own, but it is obviously one of the places where designers of curriculum materials can be of enormous help, designing those materials with a rich variety of choices for teacher and child, and freeing the teacher from the role of "leader-dragger" along a single preconceived path, giving the teacher encouragement and real logistical help in diversifying the activities of a group.

Holt was once asked by some teachers how students could be helped to "explore and learn independently in their field." For reply Holt told them the story of a seven-year-old boy who read an article about underwater swimming. His mother then led him to an article about divers. Then she interested him in divers for treasure—ancient objects such as bowls and ancient weapons. Before long the boy grew interested in pre-Homeric civilizations and he was fascinated by the story of Schliemann's discovery of Troy. Eventually he wanted to find out all he could about archaeology, and read everything he could find on the subject. A sympathetic and imaginative mother accomplished this for her son.

FRONTIERS

All Things Are Connected

A FEW extracts from a book review in the March-April *Community Service Newsletter* (issued by Community Service, Inc., P.O. Box 243, Yellow Springs, Ohio 45387) will serve best to introduce what we want to tell about this week. The book is *An Enchanted Childhood at Raven Rocks* by Elsa Crooks Harper, published by Raven Rocks Press, available in cloth from Community Service at \$15 postpaid. The author, born in 1906, tells about growing up in a rocky area in Belmont County, Ohio, which her childhood home overlooked. She recounts for her readers "such integral aspects of Raven Rocks life as quilting bees, box socials, corn husking, soap making, threshing time, country cooking, taffy pulls, cider making, canning and preserving and much, much more."

She tells us in rich detail about front porches, general stores, country doctors, one-room schoolhouses, barns, country kitchens, even the house out back. She describes the working layout of a farm with its stable, chicken house, wood lot, pig pen, cow barn, granary, orchard, smoke house, wagon shed and various other necessary outbuildings. She provides us with several pages of home cures, old time recipes, household hints and some of her poetry. . . . Every piece of string was saved for later use. Paper was never discarded, whether it was an old Sears catalog or an outdated calendar. Salt came in cloth bags which, when empty, were taken apart and made into hankies, often with crocheted edging.

The people of the Raven Rocks community of those days shared with their neighbors.

The extraordinarily wasteful duplication of consumer items in our own culture did not exist at Raven Rocks. Not only equipment but skills, talent, time, energy and ideas were all part of a common pool of resources available to all. One family might have the quilting frame or the sausage grinder or the extra team or horses, another family owned a gramophone and would play music into the phone line for everyone to enjoy. Threshing time was a joint community effort. Buildings were raised by the community for newlyweds. Barter was the order of

the day at the general store. Neighbors worked and played together, often at the same time. Many types of "bees" were held during the year, combining cooperative work and fun.

This account of Elsa Crooks Harper's book is by Dianne Adkinson. Another article about Raven Rocks by Warren Stetzel relates that in 1970 a group of nineteen individuals living in that area joined in order to buy the 843-acre area of Raven Rocks.

What had brought a group whose average age was only 25 to so bold a move was the possibility that Raven Rocks would be strip mined. Dramatic ravines and rock formations that for generations had been a favorite place for outings would likely be damaged, if not destroyed, and once damaged, could never be restored. It would be gone forever. Our hope was to save it by making it a permanent preserve.

To help pay for the land and for the renewal and reforestation they planned, and to renovate old buildings, the group began to raise a crop of Christmas trees, every year, and in 1986 they harvested just over 5,150 trees—a banner crop. With the help of Malcolm Wells, an architect skilled in the design of underground homes, some of the members of the Raven Rocks group are building dwellings which are designed to be gentle on the land, beneath the surface. They also managed to print Elsa Crooks Harper's book last year, since her family originally owned land in the region. They tooled up for production of the book because they thought that its history of a period in American history might have more than local appeal. Stetzel says:

But what interested us most in Elsa's book was the recurring theme of a childhood made enchanted, not by affluence, not by preoccupation with fame and gain, nor by the competitive urge to get ahead of the rest, but by mutual effort among people who cared about each other, living in a world whose beauty they recognized and valued. These are themes very close to our hearts and concerns. These are appropriate messages for our times. . . .

So what of bad news? The first thing that comes to mind is the fact that each year we see more effects than the year before of air pollution on the Christmas trees. We see real damage, some of it significant

damage that the state agricultural research station identifies as the consequence of an intense episode of air pollution.

Perhaps only four or five years away we anticipate the invasion of the gypsy moth, which is already into our county. The consequences to the Christmas tree business, and to the forest, we have neither the time nor the information to adequately weigh yet.

Both the increasingly serious effects of air pollution and the threat of the gypsy moth are good reminders that Raven Rocks is part of the larger world. We won't solve either of these problems by ourselves. That is good. The message in this kind of event—that all things are connected—is not one we resist or resent, convinced as we are that there are few messages we human beings need more to learn.

We had high hopes when we undertook this project that some of the things we try here might help make our world a little better. It has never been our wish to create a better world for ourselves alone. We have felt from the start that what could be made better here needs to be a lever on the larger world. Otherwise it should go, and it will go, the way of all selfish endeavors that seek to sustain themselves in contradiction to the fundamental truth that all things are connected, all are related, all are one. We are our brother's keeper. That other fellow and his welfare bear the same kind of relation to us persons, as does Raven Rocks to the larger world of places and things.

Meanwhile we stick to our Raven Rocks guns, still convinced as we are that the real test of any of our ideas and ideals is whether we can make them part of our daily lives, part of our way of seeing, of doing, and of being.

Stetzel concludes by saying that they realize that the preservation of Raven Rocks is not the "ultimate goal," yet saying it was an opportunity that came to this group, and the members responded. "It is so with the cry of the vanishing species, or of the South African black, the poisoned soil and seas, and the Nicaraguan peasant. All things are connected."