VOLUME XL, NO. 14
APRIL 8, 1987

ANALYSIS AND SYNTHESIS

ON the one hand there is writing (articles, pamphlets, and books) devoted to analysis of things going wrong, and there is writing which may profit from analysis and use it in small doses, but is largely about synthesis—doing things right, or as right as circumstances will permit. The one is diagnosis, the other about cure. As we live and think, there need to be a lot of things going wrong for them to get attention. One burglary in a town is barely noticed, but when a crime wave comes along the analysts start writing books. These books are really a study of epidemiology, which involves, among other things, many numbers or statistics. In matters of health, the remedy is usually some form of sanitation, requiring large-scale organization, inspection, and possibly control of the food supply, or the control of air pollution—which might mean a limit on the number of automobiles on the road. Some of such measures may prove easy to enact, others may be virtually impossible, such as motor vehicle bans. But the analyses of troubles of this sort are still valuable as information required in order to talk about solutions that may be applied.

How does synthesis apply to such problems? We hardly know, except for those rare souls who go to particular trouble to arrange their lives so that it becomes possible, say, not to need a car. Yet there are such people; they exist. They are Kantians who believe in practicing as individuals rules of behavior which ought to be universal laws of conduct. Most people expect governments to step in and take charge when socio-economic ills or other widespread troubles become really serious, but we are coming to realize, that as Peter Berg put it, governments can barely even hear "outcries against obvious large-scale destruction of the planetary biosphere from merely reformminded environmentalists now, and aren't likely to take bioregionalists seriously until the District of Columbia itself becomes totally uninhabitable."

There are now areas of the world in which life is already exceedingly difficult, if not "totally uninhabitable," and to which serious analysis is being applied. The broad subject being investigated is demography, which means, according to the dictionary, "the statistical study of human populations especially with reference to size and density, distribution, and vital statistics." This is the content of Worldwatch Paper No. 74, with the title, *Our Demographically Divided World*, by Lester R. Brown and Jodi L. Jacobson. Their topic is really what they call the "demographic trap," in which a number of the Third World countries have been caught. These countries are besieged by a decline in food production and at the same time rapid population growth.

> Existing demographic analyses do not explain the negative relationships between population growth and life-support systems that are now emerging in scores of Third World countries. The demographic transition, a theory first outlined by the eminent demographer Frank Notestein in 1945, classified all societies into one of three stages. Drawing heavily on the European experience, it has provided the conceptual framework for a generation of demographic research. During the first stage of the demographic transition, which characterizes premodern societies, both birth and death rates are high and population grows slowly, if at all. In the second stage, living conditions improve as public health measures, including mass immunizations, are introduced and food production expands. Birth rates remain high, but death rates fall and population grows rapidly. The third stage follows when economic and social gains, including lower infant mortality rates, reduce the desire for large families. As in the first stage, birth rates and death rates are in equilibrium, but at a much lower level.
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> This valuable conceptualization has been widely used by demographers to explain differential rates of growth and to project national and global populations. But as we approach the end of the twentieth century, a gap has emerged in the analysis. The theorists did not say what happens when developing countries get trapped in the second stage,

> unable to achieve the economic and social gains that are counted upon to reduce births. Nor does the theory explain what happens when second-stage population growth rates of three per cent a year—which means a twentyfold increase per century—continue indefinitely and begin to overwhelm local life-support systems.

A balance between population and food supply is essential to avoid disaster. Otherwise the country is stuck in stage two and becomes less and less able to move on, having to borrow and borrow just to keep people alive. The money comes from the banks of the industrialized nations, who are (or were) confident that the borrowers would pay off the loans as they began to progress, but they didn't progress and kept on producing more children, bringing disaster upon themselves. As the Worldwatch paper says:

> Once incomes begin to rise and birthrates begin to decline, the process feeds on itself and countries can quickly begin to move to the equilibrium of the demographic transition's third stage. Unfortunately, these self-reinforcing trends also hold for the forces that lead to ecological deterioration and economic decline: Once populations expand to the point where their demands exceed the sustainable yield of local forests, grasslands, croplands, or aquifers, they begin directly or indirectly to consume the resource base itself. Forests and grasslands disappear, soils erode, land productivity declines, and water tables fall. This in turn reduces per capita food production and incomes, triggering a decline in living standards. . . .
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> Grouping geographic regions according to the rate of population growth shows five of them, containing 2.3 billion people, in the slow growth category. Bracketed by Western Europe, which is on the verge of reaching zero population growth, and by populous East Asia, which grows 1.0 per cent annually, this group has a collective growth rate of 0.8 per cent per year. In these societies, rising living standards and low fertility rates reinforce each other.
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> The other five geographic regions are in the rapid growth group, which contains 2.6 billion people—just over half the world's total. This group is growing at 2.5 per cent a year, three times as fast as the slowly expanding half. In actual numbers, the slow growth half adds 19 million people each year while the rapid growth group adds 64 million. For many countries in this latter group, rapid population growth and falling incomes are now reinforcing each other. Many others, such as India and Zaire, are still registering increases in per capita income, but they risk a reversal of this trend if they do not slow population growth soon.

South Asia is the area where the landless populations are concentrated and growing. East Asia, the authors say, has the biggest population of any major region, but land reforms in Japan, South Korea, and China have been beneficial.

> Although the degree of landlessness varies among India, Bangladesh, and Pakistan, there are broad similarities. A World Bank study reports that the three countries now have over 30 million landless rural households, consisting of families who neither own nor lease land. Assuming an average of only 6 people per household, the subcontinent's landless is nearly as large as the total U.S. population. In addition, 22 per cent of the cultivated holdings are less than 0.4 hectares, not enough to support a family, even when intensively farmed. Another group of farmers has between 0.4 and 1.0 hectares, not usually enough to provide an adequate standard of living. A third group, farm families who cultivate between 1.0 and 2.0 hectares of land, account for some 21 per cent of all cultivated holdings in South Asia.
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> The 30 million landless rural households, plus the nearlandless ones (with less than 0.4 hectares), now represent close to 40 per cent of all rural households in South Asia. These people depend heavily on seasonal agricultural employment for their livelihoods, and increasingly on new jobs in the agricultural service industries that are springing up as farming modernizes.
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> Unfortunately, not nearly enough work exists to employ fully the swelling ranks of the landless and near-landless. As a result, many live at the edge of subsistence. And all indications are that the growth of landlessness in South Asia will continue. In India alone, the number of landless rural households is projected to reach 44 million by the end of the century.

The authors now generalize the situation in many developing countries, giving definition to the demographic trap:

> A typical developing country has thus been in the middle stage of the demographic transition for close to four decades. This high-fertility, low mortality stage cannot continue for long. After a few decades, countries should have put together a

> combination of economic policies and family planning programs that reduce birth rates and sustain gains in living standards. If they fail to do so, continuing rapid population growth eventually overwhelms natural support systems, and environmental deterioration starts to reduce per capita food production and income.

In countries where populations are rapidly growing, young people are more and more in the majority: "in dozens of developing countries 40 per cent of the population is now under the age of fifteen"—about to enter the cycle of the child-bearing period.

From the viewpoint of analysis, the prospects for the next century are not good. How about the prospect in terms of those who are active in working on synthesis without attempting to make predictions?

Analysis is the prevailing mode of research in the modern world—the scientific method. Synthesis means the putting together of elements that have been shown to work well. This, too, is the practice of science, but a science which learns from nature by the study of natural processes and adapting to them, not attempting to conquer and alter them.

Synthesis means going out on the land and using it as it ought to be used, regardless of what others do. It means setting an example in terms of attitude and practice. Some remarks by Wes Jackson, of the Land Institute in Kansas, at a Permaculture Conference in Washington, will illustrate. He said:

> It doesn't make sense to talk about changing agriculture or changing farming unless we're willing to talk about changing the society at large. What's happening to the farmer and the farm is simply a faint foreshadow of what's to come for the culture at large. . . . I think there are any number of people that are effectively bringing about the necessary changes in agriculture, and not a single one of them is on a federal payroll. There are no federal people at this permacultural conference, for gosh sakes. Why shouldn't the USDA have representatives at the permaculture conference if they're really serious? They're not. I'll bet you that the State of Washington doesn't have any State Agriculture people here.

The Land Institute, as most readers know, was founded by Wes Jackson some twelve years ago to do research on developing seed for a perennial grain for growth on the prairie which will require much less plowing and replace wheat and other annuals. It is in effect a school for farmers and teachers of farmers, in which the students are paid a stipend for working with the staff from the middle of February to the middle of December—the school year. The program is dependent on solar energy and uses no pesticides or artificial fertilizer. Jackson and his wife, Dana, and the staff, hope to gradually modify the thinking of people working in agriculture by showing how sustainable agriculture works.

Another educational center for the practice of synthesis is the New Alchemy Institute on Cape Cod, put together by John Todd and associates in 1970. You could say that it began as a place where people learned and practiced subsistence farming. The best account of the early days at New Alchemy is a chapter in a Harper paperback—*What Do We Use When the Ship Goes Down?* (1976), by a writer named *My*. In his summing up *My* says:

> The essential requisite for the success of New Alchemy—and everyone here seems to sense it—is not money (though of course money is needed, or they will go under). It is the sense of a balanced interdependence with each other and with nature and an understanding of the delicacy of that balance. It is what John Todd calls the concept of interconnected webs. What New Alchemy provides is more than just hardware, more than just a solar-heated, wind-powered greenhouse/aquaculture complex that is inexpensive to construct, operates almost anywhere, and produces no-cost food—in itself a unique and important gift to the world—but a tangible way to live in harmony with our own ecosystem, a way to use the sun and the wind and the elements to produce nourishing food. And *that* is alchemy.

Nancy Todd, who now edits *Annals of Earth*, having started with her husband John Todd, the Ocean Arks International, devoted to developing a sail-powered trimaran for low-cost fishing, introduced an article about the future of New Alchemy Institute by John Quinney and Jane Sorenson in No. 3 of the fourth volume of *Annals*, saying:

> The saga of the founding of New Alchemy has often been told. Its successful transition—transformation would be a better word—to an effective second generation institute was far from easy

and the credit lies entirely with the present staff. . . . But as John Quinney [the present head] very modestly mentions . . . the restructuring has been completed and the Institute is well launched in a direction that, while honoring the past, makes its long-standing ideas more accessible and relevant to the growing numbers of people interested in integrating them into the way they think and live.

And Quinney and Jane Sorenson said:

We are still developing our statement of mission, but our goal is to promote house, garden, and small farm systems that are environmentally sound, energy-efficient, cost effective, replicable, and simple to manage.

We have defined our primary audiences as:

Home gardeners, solar builders, homeowners and renters—people desiring practical information on household systems that conserve energy, water and resources, and maximize year-round food production.

Students, teachers and children.

Small-scale farmers—people working small acreages for the commercial production of pesticide-free food year-round in market gardens and energy-efficient greenhouses.

For the future they plan:

A demonstration of housing for the future: a dwelling and landscape designed to be cost-effective, ecologically sound, and marketable, producing pesticide-free food year-round and recycling materials, nutrients and wastes. . . .

A five-acre organic market garden featuring vegetable, flower, herb and berry production. The market garden will be used primarily for research and training purposes.

A five-thousand square foot greenhouse operated for research and training in commercial-scale, year-round, pesticide-free vegetable and seedling production.

A commercial-scale leaf and organic matter composting operation.

Our primary guidelines are: to transform the Institute's site into a compelling demonstration and educational facility to serve twenty thousand visitors annually, to provide visitors with practical information and resources for replicating the Institute's work in their own homes, landscapes and small farms. . . .

John Todd, of Ocean Arks International, brings the reader up to date with news of what has been happening to the Ocean Pickup, the 32-foot long *Edith Muma*, a fishing trimaran first launched in 1982 in New England waters and tested in fishing trials on Nantucket Sound and in waters off Guyana in South America. After numerous successful demonstrations, the *Edith Muma* struck a reef while sailing fast and was repaired and improved by the designer, Dick Newick, who installed a Lungstrom rig suitable for Pacific winds. The only remaining problem is to persuade the Guyana government to issue a fishing license. "We suspect," says Todd, "the delays are the result of our project being perceived as too small-scale by those who are in a position to make decisions on our behalf. We are in a bit of a Catch-22. Our project is intentionally small until the experiment can prove to us, and to the financial community, that it warrants being larger." He is hoping to get the needed permission.

Meanwhile, at home on Cape Cod, they now have a twenty-foot trimaran, lately christened GAIA, with her home port in Woods Hole. Todd is also raising catfish in Shanks Pond (his home address is 10 Shanks Pond Road, Falmouth, Mass. 02540).

> We are raising the catfish in the solar silos at a density of one fish per two gallons which is probably a record ecosystem-based, intensive aquaculture. In preliminary trials we have grown catfish to edible size at this density. Current growth rates are good enough that, with luck, we may have a marketable sized crop by Christmas. Labor and production costs are low and the solar pond water is used to irrigate and fertilize horticultural crops.

Locally, the catfish he speaks of are called yellow bullhead, said to be particularly tasty.

Reports on synthesis, as anyone can see, are very different from accounts of analysis. *Annals of Earth* is filled with such reports. A subscription may be obtained by a gift of ten dollars to the *Annals* at the address of the Todds, given above.

REVIEW
HERE AND/OR HEREAFTER

THIS week we go back to a book—one frequently visited—that makes us wonder about the author: are we reading a book or trying to read a man? There are some books which can be read simply as books, more or less accurate reports about some part of the world or the people in it. But the book we are going back to is not a book of that sort. Wendell Berry's *A Continuous* Harmony, published in 1972 by Harcourt Brace Jovanovich, is a collection of essays in which the author shares with his readers the thoughts and feelings which come to him during a quest he has undertaken—a search which he seems to understand well enough, and is content with the means or path he has chosen, but which the reader must somehow discover or divine.

As you slowly turn the pages you reach certain conclusions along the way. You realize, for example, that here is a man thoroughly convinced that the world of conventional thought, talk, and involvement is intrinsically fraudulent. He lives and thinks behind the fraud, or above it, although he often refers to its deceptions in almost casual exposures of the lies that people have been led to believe in. He lives on a farm he has reconstructed—or is in the process of reconstructing—along the bank of the Kentucky River, close to a small town. For a sample of how he thinks, we take an entry from the diary he then kept:

> Across the whole range of politics now (and I suppose always) you find people willing to act on the assumption that there is some simple abstraction that will explain and solve the problems of the world, and who go direct from the discovery of the abstraction to the forming of an organization to promote it. In my opinion those people are all about equally dangerous, and I don't believe anything they say. What I hold out for is the possibility that a man can live decently *without* knowing all the answers, or believing that he does—can live decently even in the understanding that life is unspeakably complex and unspeakably subtle in its complexity. The decency, I think, would be in acting out of the awareness that personal acts of compassion, love, humility, honesty are better, and more adequate, responses to that complexity than any public abstraction or theory or organization. What is wrong with our cities—and I don't see how you can have a great civilization without great cities—may be that the mode of life in them has become almost inescapably organizational.
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> It used to be that every time I heard of some public action somewhere to promote some cause I believed in, I would be full of guilt because I wasn't there. If they were marching in Washington to protest the war, then how could my absence from Washington be anything but a sin? That was the organizational protestant conscience: in order to believe in my virtue I needed some organization to pat me on the head and tell me I was virtuous. But if I can't promote what I hope for in Port Royal, Ky., then why go to Washington to promote it?
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> What succeeds in Port Royal succeeds in the world.

What is "living decently"? Berry answers this question by telling about a farmer friend who raised sheep. He was told that they could "make money" by marketing some inferior lambs. He refused,

> . . . saying that his purpose was the production of *good* lambs, and he would sell no other kind. He meant that his disciplines had to be those of a farmer, and that he would be diminished as a farmer by adopting the disciplines of a money-changer. It is a tragedy of our society that it neither pays nor honors a man for this sort of integrity—though it depends on him for it.

For Berry the world of nature is a vast source of analogues for the conduct of life. He reads his life on the farm as a text on religious philosophy and he translates the language of scripture into what seems the song of life. His writing is a rendering of meanings, of implications we understand when he gives them attention. Speaking of our present culture, he contrasts its goals with the patient fulfillments that can be seen as coming from the spontaneous behavior of humans with integrity:

> It is by now a truism that the great emphasis of our present culture is upon things, things as things,

things in quantity without respect to quality; and that our predominant techniques and attitudes have to do with production and acquisition. We persist in the belief—against our religious tradition, and in the face of much evidence to the contrary—that if we leave our children wealthy we will assure their happiness. A corollary of this is the notion, rising out of the work of the geneticists, that we can assure a brighter future for the world by *breeding* a more intelligent race of humans—even though the present problems of the world are the result, not of human stupidity, but of human intelligence without adequate cultural controls. Both ideas are typical of the materialist assumption that human destiny can be improved by being constantly tinkered at, as if it were a sort of baulky engine. But we can do nothing for the human future that we will not do for the human present. For the amelioration of the future condition of our kind we must look, not to the wealth or the genius of the coming generations, but to the quality of the disciplines and attitudes that we are preparing now for their use.

We are being virtually buried by the evidence that those disciplines by which we manipulate *things* are inadequate disciplines. Our cities have become almost unlivable because they have been built to be factories and vending machines rather than communities. They are conceptions of the desires for wealth, excitement, and ease—all illegitimate motives from the standpoint of community, as is proved by the fact that without the community disciplines that make for a stable, neighborly population, the cities have become scenes of poverty, boredom, and disease.

Berry is not a moralist. Instead of preaching he simply repeats the law. He tells how things work and gives illustrations. He is like the Buddhist priest who never tells anyone what to do but explains the operation of the Law of Karma. After his enlightenment, the Buddha taught that it was not desire but *excessive* desire which brought pain and suffering to men. And this, quite simply, is only another way of speaking of consumerism. The Buddha called it *craving.* Modern writers call it the acquisitive spirit. Some ecologists speak of it as the exploitation and waste of the resources of nature.

In his discussion of religion, Berry says that "perhaps the great disaster of human history is one that happened to or within religion: that is, the conceptual division between the holy and the world." He quotes John Stewart Collis (from his *Triumph of the Tree*)*:*

. . . whereas under polytheism the gods were intimately connected with the earth, and stimulated veneration for it, under monotheism deity was extracted from the earth. God was promoted to higher regions. He went completely out of sight. It became possible to fear God without fearing Nature—nay, to love God (whatever was meant) and to hate his creations.

To which Berry adds:

If God was not in the world, then obviously the world was a thing of inferior importance, or of no importance at all. Those who were disposed to exploit it were thus free to do so. And this split in public attitudes was inevitably mirrored in the lives of individuals: a man could aspire to heaven with his mind and heart while destroying the earth, and his fellow men, with his hands.

The human or earthly problem has always been one of behavior, or morality: How should a man live in this world? Institutional Christianity has usually tended to give a non-answer to this question: He should live in the next world. Which completely ignores the *fact* that the here is antecedent to the hereafter, and that, indeed, the Gospels would seem to make one's fate in the hereafter dependent on one's behavior here. Some varieties of Christianity have held that one should despise the things of this world—which made it all but mandatory that they should be neglected as well. In that way men of conscience—or men who might reasonably have been expected to be men of conscience—have been led to abandon the world, and their own posterity, to the exploiters and ruiners So exclusively focused *on* the hereafter, they have been neither here nor there.

In the last pages of this book Berry muses:

Remembering the new deserts of this once bountiful and beautiful land, my mind has gone back repeatedly to those Bible passages that are haunted by the memory of good land laid to waste, and by fear of the human suffering that such destruction has always caused. Our own time has come to be haunted by the same thoughts, the same sense of a fertile homeland held in the contempt of greed, sold out, and destroyed. Jeremiah would find this evil of ours bitterly familiar:

I brought you into a fruitful land

> to enjoy its fruit and the goodness of it;
> but when you entered upon it you defiled it
> and made the home I gave you loathsome.

> The damages of strip mining are justified in the name of electrical power. We need electrical power, the argument goes, to run our factories, to heat and light and air-condition our homes, to run our household appliances, our TV sets our children's toys, and our mechanical toothbrushes. . . .
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> In the name of Paradise, Kentucky, and in its desecration by the strip miners, there is no shallow irony. It was named Paradise because, like all of Kentucky in the early days, it was recognized as a garden fertile and abounding and lovely. . . . But the strip miners have harrowed Paradise, as they would harrow heaven itself were they to find coal there. . . . We have despised our greatest gift, the inheritance of a fruitful land. And for such despite—for the destruction of Paradise—there will be hell to pay.

Wendell Berry is a writer worth reading, for more reasons that we are able to give.

COMMENTARY
INHUMAN DEVELOPMENT

IN the special issue last fall of *North Country Anvil,*presenting Paul Gilk's "Nature's Unruly Mob," a study of farming and the crisis in rural culture, there are many passages worth considering, and also some choice quotations. We give first some observations by Gilk on rural community:

> Just as agriculture is not an industry, so too is community distinct from rational organization. Just as uncontrolled industrialization destroys the culture of the countryside, so too does the expansion of institutional organization serve to eradicate community. The more highly rationalized industry and organization become, the more quickly do they corrupt culture and devitalize community. Community, as Baker Brownell said, "like life, without machinery or artifice," must of necessity develop by the slow accretions of living experience. Community develops in an organic matrix of time-honored tasks coupled with face-to-face interdependence in a knowable and liveable environment. Both school and farm could be, and ought to be, bastions of this kind of life. This is the spirit of Paul Goodman's ideal—to trust that our children are capable of growing up well with simple affections in a beautiful environment with freedom.
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> The cruel irony is that we have the material means by which we might realize Goodman's ideal in rather short order: but having the means, we are totally lacking in spirit and faith. Politically, we are constantly being asked to have faith in the technological assault on the future, we are asked to have faith in "science"—not the science of humble wonder, but the science of technical mastery. This latter science is riddled with cynical belief, but it is devoid of faith. All it can do is create an increasingly dangerous technological monster.

Gilk then goes to the development of weapons systems through technology, quoting from Solly Zuckerman, formerly chief scientific adviser to the British government. He believes that the extraordinary development of weapons results, not from the military, but from scientists and technologists intent upon improving old weapons systems.

> For it is the man in the laboratory, not the soldier or sailor or airman, who at the start proposes that for this or that reason it would be useful to improve an old or devise a new nuclear warhead; and if a new warhead, then a new missile, a new system within it has to fit. It is he, the technician, not the commander in the field, who starts the process of formulating the so-called military need. It is he who has succeeded over the years in equating, and so confusing, nuclear destructive power with military strength, as though the former were the single and a sufficient condition of military success. The men in the nuclear weapons laboratories of both sides have succeeded in creating a world with an irrational foundation, on which a new set of political realities had in turn to be built. They have become the alchemists of our times, working in secret ways that cannot be divulged, casting spells which embrace us all. They may never have been in battle, they may never have experienced the devastation of war; but they know how to devise the means of destruction. And the more destructive power there is, so, one must assume they imagine, the greater the chance of military success.

We have space for one more quotation made by Gilk, this one from Jacques Ellul's *Technological Society:*

> Technique tolerates no judgment from without and accepts no limitation. . . . Morality judges moral problems; as far as technical problems are concerned, it has nothing to say. Only technical criteria are relevant. Technique, in sitting in judgment of itself, is clearly freed from this principal obstacle to human action. Thus, technique theoretically and systematically assures to itself that liberty which it has been able to win practically. Since it has put itself beyond good and evil, it need fear no limitation whatever. It was long claimed that technique was neutral. Today this is no longer a useful distinction. The power and autonomy of technique are so well secured that it, in its turn, has become the judge of what is moral, the creator of a new morality. Thus, it plays the role of creator of a new civilization as well.

Jacques Ellul's book, *The Technological Society*, certainly wears well. It has been available for more than 20 years.

CHILDREN
. . . and Ourselves
ALL COMPETENT ADULTS . . .

AN interesting thing about the homeschooling mothers who write in to *Growing Without Schooling* (we have No. 54 at hand) is the way they overcome their qualms, gain self-confidence, and even become sophisticated critics of what goes on in the schools. One contributor, Sue Radosti, for example, writes about the unnecessary fuss people make about a curriculum. She says:

> . . . The schools have really used that word "curriculum" to buffalo people into thinking that education is a much more objective, exacting science than it really is. They know that curricula are subjective and as varied as the philosophies behind them, but they still behave in public as though they and they alone have some magical way of knowing what's best, and the lay public can't possibly understand the intricacies of that magic.
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> When I first enrolled in my undergraduate education courses, I assumed that there was some set of formulas for devising curricula and that I would learn those formulas as a part of my "professional" training. Ha! The full extent of my training in curriculum evaluation (curriculum development was never even mentioned, a mystery reserved for doctoral candidates) was an afternoon session of my reading methods class, in which we were divided into small groups and given some basal readers to thumb through and "evaluate"—that is, to merely note the order in which skills were presented (no one suggested that any particular order was superior to any other) and to determine which basic linguistic philosophy was presented. We were given a brief definition of three linguistic philosophies for this task, and it was only because I'd had prior classroom exposure to linguistics that I knew enough to laugh when my group decided that our set of readers reflected two very different perspectives: "It starts with one then switches to another halfway through"—which is about as ludicrous as saying that an economics textbook espouses capitalism in the first five chapters but then shifts to a socialistic bias. It was a joke.
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> I've concluded, after talking with text-writing professors and observing the various attempts by state boards of education to devise a "state curriculum," that what really determines a curriculum is a mixture of personal opinions, judgments, prejudices, experiences, and values on the part of the people who write it, the company that publishes it, the authorities that sanction it (state or local school boards), and the people who teach it. It's as much a political process as an educational one, with the authors writing to suit the whims of the market. One professor told me that he made changes in a textbook he had written which he knew were detrimental, because a major school district refused to buy the text, and consequently the publisher refused to print it, unless it reflected a certain philosophy popular in that district. So much for the hallowed concept of the curriculum.

Back in 1983, Nancy Wallace, a homeschooling mother of children, then five and nine, faced the problem of having to supply the superintendent of schools in her area with an outline of the "curriculum" she planned to use—in "mathematics, science, language arts, reading, social studies, the fine arts, and socialization." Somewhat desperate, she asked John Holt for help. Holt gave it to her in a letter, in which he said:

> To another parent who is in much the same situation, I said that the thing to do is to take the most ordinary events of daily life and dress them up in fancy school language. Thus I suggested that in going to the store, the kid could be called "participating in consumer experience." I'm dead serious! As for what to *call* the business of having to learn according to their own curiosity, I suggested, "intrinsically motivated thematically interconnected organic learning." She has tried it on them and finds that some of them are quite impressed. Think of all the things you do, all the things you look at, all the things you talk about, all the things you are interested in. Turn each one of them into a fancy school subject and you will have a curriculum three times as fancy as anything they have in school.
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> One more word. The curriculum *can't* be too long. I know that it's a nuisance to write, but each additional page will be more intimidating than the one before it. It's a shame we have to play such games, but for a while we probably do.

She told a school teacher friend what John said and she agreed, helping with the fancy language. It worked very well. Later she

recorded these experiences along with others in what became a very popular book, *Better Than School*, issued by Larson Publications, Burdett, New York. Now, in *Growing Without Schooling* No. 54, Nancy Wallace has a letter about what it means to teach math, or rather about what math is, by which she was bothered for years:

> All along, ever since we took Ishmael (now 15) out of school, I've felt uncomfortable about math. It always seemed like the one alien (the one misfit) aspect of our school at home. "What really is math?" I used to ask mathematically-minded friends. "Aren't there ways I could be teaching it better?" For some reason, it's only been the last six months or so that I've felt that I've found people whose answers have made any sense. Perhaps that's because it's only recently that I've really looked at what Vita and Ishmael have been doing with numbers (and seen, likewise, what I've been doing). It's only been recently that I've actually *heard* what my friends have had to say. (When John said, several years back, "Math is fun," all I could think was, "Yeah, for *you*.") What I am trying to say is that I've made my fair share of mistakes. Now I am learning from them. Fortunately, as John also said, it's "never too late."
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> . . . By the time we rescued Ishmael from school at the tender age of 7, he couldn't even add two and two. . . . We used math textbooks, telling ourselves at first that although Ishmael surely needed a rest, we had to do math in order to satisfy the school authorities. Later, we just continued (not that we ever did speed drills or anything like the school math that Ishmael had suffered through) because Vita and Ishmael genuinely wanted to grow up to be competent adults and we were convinced that all competent adults knew math. . . . By the time they were about 10, both kids seemed comfortable around numbers—even negative numbers and square roots—and I used to tell people, "Yes, Vita and Ishmael really are pretty good at math."

But she still wondered about what those math textbooks were good for, and why it was important for competent adults to know about negative numbers, and how ordinary people would never need to use them. Then, one day, she got a clue from Seymour Papert's *Mindstorms.*

> It is a fascinating book, but it didn't take me long to realize that when Papert used the word "math," he didn't mean multiplication tables or speed drills, he meant a language to describe the world—a language to describe relationships in space and time. . . .
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> Once I understood the distinction between arithmetic and math, it became clear that math, as such, *wasn't* necessary. If Vita and Ishmael wanted to be competent in our money-centered (cook-book centered) society, then all they really needed to learn was a little simple arithmetic—addition, subtraction, multiplication, division, simple decimals and fractions, ratios and simple percents. I know that this seems like a long list, but what I realized was that even I knew and used all those things. (Could it be that I was competent after all?). . . .
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> Looking back, it seems clear that Vita and Ishmael only became comfortable with our textbook math when they had spent enough time in the real world using numbers—playing music, going to the bank and so on—to really see, concretely, that numbers had both set values and relative ones. Only then could they believe me when I told them that a one in the tens place was the same as ten in the ones place.
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> . . .
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> Do I regret having taught Vita and Ishmael math? Yes and no. Mostly what I am advocating is that we wait to teach math until our kids have "intuited the facts and rules," to use a phrase of Papert's. Then, we can be there, to help them write down (formally) on paper what they already know. I am also advocating that just as we expose them to Mozart or Van Gogh or Jane Austen, so we make an effort to expose them to mathematics too, if only just to give them the chance to see its beauty. And yet never by compulsion. Never by thinking, however innocently, "All competent adults . . ."

FRONTIERS

An Honorable Century

A FEW weeks ago we received from London the centenary edition of *Freedom,* founded in 1886 by a handful of English anarchists. *Freedom* is one of the MANAS (only forty years old) exchanges and we read it with interest. This issue (for October, 1986) has 88 pages and is handsomely produced, filled with historical material, with many photographs of past contributors and famous anarchists of that day, starting with Peter Kropotkin. One is struck by the strength of character in the faces, both the women and the men. "Charlotte Wilson," it is said, "was the main founder and the first editor and publisher of *Freedom,* and the leading figure in the Freedom group from 1886 to 1895." The historical articles are interspersed with contemporary thinking by present-day anarchists. The centenary issue is mainly a roll of honor of working anarchists of the past, the contributors to *Freedom,* through the years, illustrated by portraits and photographs of the various printshops and editorial offices that were used. The anarchists have been consistently anti-government and anti-militarist and obviously men and women of principle who made all kinds of personal sacrifices for what they believed in.

The anarchists were generally respected by influential thinkers in England, as an article by Philip Sansom makes clear. After a raid on the Freedom Press office in 1944 by the police, in the subsequent trial the defendants "were able to turn the issue into one of an attack on free speech—one of the freedoms the war was supposed to be fought for!"

> In doing this we were helped enormously by many writers and social thinkers who were not necessarily anarchists but who saw clearly the danger to civil liberties posed by wartime restrictions. One who was a declared anarchist was Herbert Read. . . . I like to think of him as the man who, having won the DSO and the MC as a captain in the First World War, became bitterly antimilitarist and then anarchist, and as a well-known authority on art and literature was prepared to stick his neck out to defend my comrades and me when we were attacked by the state. Herbert Read persuaded pro-war socialists like George Orwell to support our defence committee and, although he hated speaking in public, got on to platforms *twice* to speak out in our defence, alongside politicians he might well have privately despised. . . .
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> Herbert Read was to be of great use to us again when, in March 1952, Freedom Press organized a very special meeting in defence of Spanish anarchists. . . . In Barcelona men and women were being condemned by Military Tribunals to death by firing squad or to terms of imprisonment of 20 to 30 years.
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> We decided quite consciously to pull rank in choosing our speakers. They were to be internationally known writers and artists whose standing not even Franco could ignore. Once again. Herbert Read used his influence and we had a platform consisting of Jacob Bronowski, Augustus John, Henry Moore, MPs Fenner Brockway and Michael Foot, veteran socialist H. N. Brailsford, Kingsley Martin the editor of the *New Statesman* . . . and Herbert himself, with myself as chairman.

Our remaining space will be devoted to other current contributors, starting with Nicolas Walter, who has been writing for *Freedom* for some thirty years. He says:

> Of course the Freedom Press has frequently been criticized during its second fifty years, just as it was during its first fifty years—but generally for the wrong reasons. Militant anarchists have accused it of being quietist, philosophical anarchists of being adventurist, dogmatic anarchists of being opportunist, pragmatic anarchists of being sectarian, and so on. I have been critical myself, but for different reasons. At times when I have been involved in particular activities, I have found it badly informed, out of touch, and too willing to rely on other papers; and at all times I have found much of the material badly thought out and badly written up. But the quick answer to such criticisms is the old anarchist imperative—if you think something should be done, do it yourself—and this is what I have tried to do. . . . We must remember the end does not justify the means, but that means are ends. We must learn to get on with each other, or we shall never get on at all. What matters in the end is not the anarchist movement, but anarchist movement.

In a brief paper on "Anarchism in the Future," Colin Johnson says:

We have been misled by the nature of politics. By entering its arena and opposing its results, we only reinforce its mechanisms. Our opposition refines and our struggle strengthens it. Politics is the means our culture uses to focus power and direct authority; it cannot serve our desires. . . . The only way forward is to create a new philosophy, one that will engender different attitudes and understanding, and lead to different ways of acting and living. . . .

The seeds of a new philosophy have germinated. It is Holism, a system of belief which is capable of containing all the perceptions of the human mind and giving them context and perspective without losing grip of rationality. . . . In holism science is ecology, its mechanics are cosmology, its spirituality a biophilic buddhism, and its politics anarchism. . . . Unless we broaden our mental view beyond the reflections of current culture, we will remain as a strand of that culture, confined in an alley, where only the most dedicated will come. Anarchism in the future must be found as part of everyday life, without the need of a map.

Vernon Richards, perhaps the most respected of still-living old-timers among English anarchists, concludes his essay:

The more we do for ourselves, the more we will want to, and know how to, do for ourselves. We must starve the State of initiative. Every radical worthy of the name has shared Jefferson's view that "that government is best which governs least." The Tory Party promises more "law and order," the Labour Party more government control of the "infrastructure," the Alliance parties to "take power." All of them promise *more and more government*. It is up to us to resist this threat by protest and demonstration (not so much directed towards the government but to draw our fellow citizens' attention to the dangers) and by our actions, showing by our initiative and sense of community that we are more than capable of running our own lives.

What can we do to ban the H-Bomb? Very little, friends, until we decide that running our own lives is an important part of life. When we find the time and the patience to run our own lives, we shall have little time or patience for the antics of politicians and power-maniacs, and no energy to waste on making weapons for our own annihilation.

Some final words by Derrick Pike:

Pacifists must become anarchists because there is no point in working to abolish the social evils of injustice, poverty and war if they support the state system which causes all these evils.

People who become pacifists or anarchists do so because they care for their fellow human beings. Anarchists and pacifists want a society which is free, egalitarian and peaceful. And because they want it they must unify their beliefs and work together to produce it.