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LIKE MEN IN A DREAM

THE books about the possibility or probability of nuclear war keep coming out, and since we receive a good many of them for review, we are impressed by the fact that none of them we have read in seem to offer much in the way of an actual remedy, although there are many terse accounts of our present situation by thoughtful writers. In one of these books, *Voices of Survival*, edited by Dennis Paulson (published by Capra Press in Santa Barbara, Calif., at $8.95 in paperback), one of the contributors quotes from George Kennan, former U.S. Ambassador to Russia, who said:

> Over all these years, the competition in the development of nuclear weaponry has proceeded steadily, relentlessly, without the faintest regard for all the warning voices. We have gone on piling weapon on weapon, missile upon missile, new levels of destructiveness upon old ones.
>
> We have done all this helplessly, almost involuntarily like the victims of some sort of hypnotism, like men in a dream, like lemmings heading for the sea, like the children of Hamelin marching blithely along behind their Pied Piper.

One is impressed by the clarity of this expression. A man like that, one thinks, will surely tell us what to do. But when one reads on, attempting to digest twenty-five or thirty such statements, all equally forceful and clear, all saying very much the same thing, this display of the rhetoric of horror begins to pall, even though respect for the writers will probably grow, because the recommendations are so similar. We are told that before us all is Operation Bootstrap. Hugh Downs for one, a radio and TV broadcaster, says:

> Examining the old theories of deterrence, and the views of those who favor even stronger nuclear arsenals, I now find only wrong axioms and a rigidity of course so alarming it no longer matters whether a military expert has more information. It is no longer a military matter. (Many of the experts have acknowledged that thermonuclear weapons have no military value.) It is, rather, as though two people in a vat of gasoline up to their necks are arguing who has the most matches.
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> Why are not more acting to save our world? Among the reasons, I believe, are:
>
> (a) A psychological barrier to acceptance of facts too horrible to cope with . . . a kind of denial that allows an individual to retain sanity, to defer action, and to sleep. Unfortunately, as a survival trait, this is not appropriate to the unique threat now facing us. There isn't time for the technique suitable to the pace of evolution.
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> (b) Too many people may still regard a thermonuclear bomb as simply a much more powerful bomb than a ton of TNT. By habit they may still believe they'll be safe outside the blast zone.
>
> (c) Many have trouble fighting off a feeling of impotence. The mystery that no sane person or nation wants this to happen, but all seemed impelled toward it by an unexplained force, breeds despair.

Downs, however, believes it possible that horror at the prospect of nuclear war will grow great enough to make people cry out against it and affect governmental policy. And he hopes that one of the great powers will break "the drift by a sort of 'judo' technique of stepping aside—refusing to up the ante, and taking the lead in breaking away from the brink."

This book has some 120 contributors, from heads of states, famous physicists, and public figures including actors and actresses and musicians. The comments of the physicists are probably the most impressive, but after a while no one stands out and the conclusion is likely to be that you are simply glad that these people exist and are being heard. The consensus is that nuclear war is a terrible thing to look forward to—fatal to most of us and the planet—and we all ought to do what we can to put an end to movement in that direction. But do such books do some real good? We don't know, but hope so, because there will be more of them.

Our conclusion was that we might do better to read Plato, especially the seventh book of the *Republic*. The platonic philosophy is a challenge to many of our well-established assumptions. It was

Plato's view that understanding ourselves is far more important than puzzling over the causes of war, that a just society is more important than the attempt to create a non-warlike society remaining the way we are. He held that, as we are, our minds are under a great cloud of illusion which has fixed our thinking in channels we are unable to abandon, although, once in a while, some wise individual is able to break out of the cloud and see things as they are. He is then of course immediately unpopular and threatened by those who are still governed in life and thought by their misconceptions.

What, then, is the duty of those few who are wise? That question is the subject-matter of the *Republic*, along with Plato's (through Socrates) reply. Many people read Plato—there is something compelling about his prose—but few readers take him seriously, largely because they are unable to. But we ought to try, if only because, as Alfred North Whitehead said, "All subsequent philosophy is but footnotes to Plato."

The seventh book of the *Republic*, then, contains his famous allegory of the Cave which he used to give an account of human nature as it is now constituted. At the very beginning of the book, Socrates says:

> Picture men dwelling in a sort of subterranean cavern with a long entrance open to the light on its entire width. Conceive them as having their legs and necks fettered from childhood, so that they remain in the same spot, able to look forward only, and prevented by the fetters from turning their heads. Picture further the light from a fire burning higher up and at a distance behind them, and between the fire and the prisoners and above them a road along which a low wall has been built, as the exhibitors of puppet shows have partitions before the men themselves, above which they show their puppets.
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> All that I see, he said.
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> See also, then, men carrying past the wall implements of all kinds that rise above the wall, and human images and shapes of animals as well, wrought in stone and wood and every material, some of these bearers presumably speaking and others silent.
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> A strange image you speak of, he said, and strange prisoners.
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> Like to us, I said. For, to begin with, tell me do you think that these men would have seen anything of themselves or of one another except the shadows cast from the fire on the wall of the cave that fronted them?
>
> How could they, he said, if they were compelled to hold their heads unmoved through life?
>
> And again, would not the same be true of the objects carried past them?
>
> Surely.
>
> If then they were able to talk to one another, do you not think that they would suppose that in naming the things that they saw they were naming passing objects?
>
> Necessarily.
>
> And if their prison had an echo from the wall opposite them, when one of the passers-by uttered a sound, do you think they would suppose anything else than the passing shadow to be the speaker?
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> By Zeus, I do not, said he.
>
> Then in every way such prisoners would deem reality to be nothing else than the shadows of the artificial objects.
>
> Quite inevitably, he said.
>
> Consider, then, what would be the manner of the release and healing from these bonds and this folly if in the course of nature something of this sort should happen to them. When one was freed from his fetters and compelled to stand up suddenly and turn his head around and walk and to lift up his eyes to the light, and in doing all this felt pain and, because of the dazzle and glitter of the light, was unable to discern the objects whose shadows he formerly saw, what do you suppose would be his answer if someone told him that what he had seen before was all a cheat and an illusion, but that now, being nearer to reality and turned toward more real things, he saw more truly? And if also one should point out to him each of the passing objects and constrain him by questions to say what it is, do you not think that he would be at a loss and that he would regard what he formerly saw as more real than the things now pointed out to him?
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> Far more real, he said.
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> And if he were compelled to look at the light itself, would that not pain his eyes, and would he not turn away and flee to those things which he is able to discern and regard them as in very deed more clear and exact than the objects pointed out?
>
> It is so, he said.
>
> And if, said I, someone should drag him thence by force up the ascent which is rough and steep, and

> not let him go before he had been drawn out into the light of the sun, do you not think that he would find it painful to be haled along, and would chafe at it, and when he came out into the light, that his eyes would be filled with its beams so that he would not be able to see even one of the things we call real?
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> Why no, not immediately, he said.
>
> Then there would be need of habituation, I take it, to enable him to see the things higher up.

But eventually he would see things clearly in the light of the sun, and he would regard with pity the people still in the Cave. He would in all likelihood choose—especially if asked—to return to the Cave, recover his old limited vision, and explain the reality of the outside world to those who had never experienced it. Then Plato has Socrates say:

> Now if he should be required to contend with these perpetual prisoners in "evaluating" these shadows while his vision was still dim and before his eyes were accustomed to the dark—and this time required for habituation would not be very short—would he not provoke laughter, and would it not be said of him that he had returned from his journey aloft with his eyes ruined and that it was not worth while even to attempt the ascent? And if it were possible to lay hands on and to kill the man who tried to release them and lead them up, would they not kill him?
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> They certainly would, he said.

It is Plato's intent to convince his readers that the life in the Cave is the human situation, and his concern then becomes the kind of preparation and education that those who have become wise by escaping from the cave should receive, in order to guide and rule the people still living in darkness. They will need, he suggests, bifocal vision, understand how the prisoners think, and how to begin with their instruction in ways that will not turn them away from a higher life. The instructors or Guardians must learn to live in two worlds—the world of reality and the shadowy world of illusion. He then proceeds to decisions about the best curriculum for their educational task. In one place in the *Republic* he considers that opinion, which all humans have, is of two sorts—dubious opinion based only on sense perception, and true opinion, which is not knowledge, but tends in the right direction. All humans, again, have this latent capacity, but it finds no expression in those wedded to reliance on sense perception as the right authority.

What is true opinion? It is *anamnesis,* Plato says, the inward memory of the soul, of which we are capable because we have within us the soul-memory of a life of spirit, before being imprisoned in fleshly bodies, which obscures true vision. Life on earth, or in the Cave, is imprisonment in matter. Education is the great undertaking of helping humans to emerge in the light. This is, or begins with, the teaching of virtue, and whether or how virtue is taught is the question to which Plato devoted his entire life. He believed that we all have a natural inclination to the practice of virtue, as an expression of our higher nature, but that it may be deeply clouded by our imprisonment in the Cave. He made Socrates his model of a teacher because it seemed to him that the old Athenian had somehow the capacity to teach virtue, although it could not be made clear how this was done.

Plato is very thorough in his investigation of these questions, noting again and again that virtuous men seem unable to develop their own qualities of character in their children. He will not allow this teaching to be reduced to a formula, since formulas are useful only in finite matters such as scientific definition and calculation, whereas the formation of character has in it an incommensurable factor that cannot be defined in limited terms, and all definitions require this.

Yet whatever the mystery involved, there are those who from an internal energy rise to wisdom and perception of the good, and such humans must be called to the duty that their achievement imposes on them. At issue is the government and welfare of the community. Therefore, Socrates says:

> It is the duty of us, the founders, then, said I, to compel the best natures to attain the knowledge which we pronounced the greatest, and to win to the vision of the good, to scale the ascent, and when they have reached the heights and taken an adequate view, we must not allow what is now permitted.
>
> What is that?
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> That they should linger there, I said, and refuse to go down again among those bondsmen and share

their labors and honors, whether they are of less or greater worth.

Do you mean to say that we must do them this wrong and compel them to live an inferior life when the better is in their power?

You have again forgotten, my friend, said I, that the law is not concerned with the special happiness of any class in the state, but is trying to produce this condition in the city as a whole, harmonizing and adapting the citizens to one another by persuasion and compulsion, and requiring them to impart to one another any benefit which they are severally able to bestow upon the community, and that it itself creates such men in the state, not that it may allow each to take what course pleases him, but with a view to using them for the binding together of the commonwealth. . . .

Down you must go then, each in his turn, to the habitation of the others and accustom yourselves to the observation of the obscure things there. For once habituated you will discern them infinitely better than the dwellers there, and you will know what each of the "idols" is and whereof it is a resemblance, because you have seen the reality of the beautiful, the just and the good. So our city will be governed by us and you with waking minds, and not, as most cities now which are inhabited and ruled darkly as in a dream by men who fight one another for shadows and wrangle for office as if that were a great good, when the truth is that the city in which those who are to rule are least eager to hold office must needs be best administered and most free from dissension, and the state that gets the contrary type of rule will be the opposite of this.

Impossible, he said, for we shall be imposing just commands on men who are just. Yet they will assuredly approach office as an unavoidable necessity, and in the opposite temper from that of the present rulers in our cities.

For the fact is, dear friend, said I, if you can discover a better way of life than office holding for your future rulers, a well-governed city becomes a possibility. For only in such a state will those rule who are really rich, not in gold but in the wealth that makes happiness—a good and wise life. But if, being beggars and starvelings from lack of goods of their own, they turn to affairs of state thinking that it is thence that they should grasp their own good, then it is impossible. For when office and rule become the prizes of contention, such a civil and internecine strife destroys the office seekers themselves and the city as well.

Most true, he said.

Can you name any other type or ideal that looks with scorn on political office except the life of true philosophers? I asked.

No, by Zeus, he said. . . .

What others, then, will you compel to undertake the guardianship of the city than those who have most intelligence of the principles that are the means of good government and who possess distinctions of another kind and life that is preferable to the political life?

No others, he said.

These were Plato's counsels, not directly in behalf of a peaceful world, but for a society ruled by good and wise men—the kind of society which, in our time, would surely be peaceful. We might add that, whether or not we think such a society is in any way possible for us, the counsels are sound, as we easily recognize from our own experience. But these counsels are no more heard today than they were in Plato's time. Yet they were heard by the few, then, as they are now, and this keeps Plato a living influence. Who are these few? They are human beings who take the position declared by Socrates at the end of the ninth book of the *Republic*. Being asked how the philosopher behaves, Socrates said, that in respect to public affairs, "He will gladly take part and enjoy those things which he thinks will make him a better man, but in public and private life he will shun those that may overthrow the established habit of his soul." In that case, his questioner said, "he will not willingly take part in politics." Socrates replied:

Yes, by the dog, said I, in his own city he will, yet perhaps not in the city of his birth, except in some providential conjuncture.

I understand, he said. You mean the city whose establishment we have described, the city whose home is the ideal, for I think it can be found nowhere on earth.

Well, said I, perhaps there is a pattern laid up in heaven for him who wishes to contemplate it and so beholding to constitute himself its citizen. But it makes no difference whether it exists now or ever will come into being. The politics of this city only will be his and of none other.

That seems probable, he said.

REVIEW
MAN AND NATURE

SINCE we live in what may be the dawn of the age of ecology, a time of concern for the world of nature instead of almost total preoccupation with ourselves, one may wonder if there is a beginning of a change in other aspects of culture, that might make the time to come more like a civilization than it is now. One speaks of such possibilities with hesitation since we have so far to go. Unfortunately, since the writers of articles about "modern art" seem to have a special language—one we hardly understand—we know little of what is going on in the art world, and are disinclined to pursue "research, in the matter, but rather chose to look at an old book in our library, a small book first published in England in 1911, which soon became famous and was kept in print for many years.

It is *The Flight of the Dragon* by Laurence Binyon. It has 112 pages, issued by John Murray in the series called Wisdom of the East, devoted to the theory and practice of art in China and Japan, hundreds of years ago. One chapter is titled "Relation of Man to Nature," which we took pleasure in reading again. For that, surely, is the chief significance of Ecology. The qualities of the paintings Binyon writes about seem to be an effect of the spontaneous awareness of the ecological relationship between man and nature. These qualities should begin to appear again in art when whatever is a true relation in feeling and attitude begins to develop, little by little, in our society. Binyon says:

> It is in the relation of man to nature that the painting of China and Japan has sought and found its most characteristic success. Probably the first thing that strikes everyone, on first making acquaintance with the painting of China and Japan, is the predominance of subjects taken from external nature, and the remarkably early period in which landscape themes appear. At first sight one might attribute this characteristic merely to the passion for nature, the adoration of flowers, which has for so many ages distinguished both these races.
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> But it is something deeper than innocent delight which informs these schools of painting. Innocent and intense delight in the virginal beauty of fresh blossoms, in the dewy green of water-meadows, in the shadowy leafiness of great trees, in the eye-reposing blue of remote mountains, is evident in numberless pictures of the earlier schools of Europe; but there these amenities of nature are but an episode.
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> It is a far different spirit which animates the Asian landscapes. In these paintings we do not feel that the artist is portraying something external to himself; that he is caressing the happiness and soothing joy offered him in the pleasant places of the earth, or even studying with wonder and delight the miraculous works of nature. But the winds of the air have become his desires, and the clouds his wandering thoughts; the mountain peaks are his lonely aspirations, and the torrents his liberated energies. Flowers, opening their secret hearts to the light and trembling to the breeze's touch, seem to be unfolding the mystery of his own human heart, the mystery of those intuitions and emotions which are too deep or too shy for speech. It is not one aspect or another of nature, one particular beauty or another: the pleasant sward and leafy glade are not chosen and the austere crags and caves with the wild beasts that haunt them, left and avoided. It is not man's earthly surroundings, tamed to his desires, that inspires the artists; but the universe, in its wholeness and its freedom, has become his spiritual home.

Another superb writer about oriental art, in this case Japanese, is Lafcadio Hearn. In an essay, "About Faces in Japanese Art," published in *Gleanings in Buddha Fields* (1898), Hearn defends Japanese artists against the criticism of Westerners, saying:

> Before I came to Japan I used to be puzzled by the absence of facial expression in certain Japanese pictures. I confess that the faces, although not even then devoid of a certain weird charm, seemed to me impossible. Afterwards, during the first two years of Far-Eastern experience,—that period in which the stranger is apt to imagine that he is learning all about a people whom no Occidental can ever really understand, I could recognize the grace and truth of certain forms, and feel something of the intense charm of color in Japanese prints; but I had no perception of the deeper meaning of that art. Even the full significance of its color I did not know: much that was simply true I then thought outlandish. While conscious of the charm of many things, the

> reason of the charm I could not guess. I imagined the apparent conventionalism of the faces to indicate the arrested development of an otherwise marvelous art faculty. It never occurred to me that they might be conventional only in the sense of symbols which, once interpreted, would reveal more than ordinary Western drawing can express. But this was because I still remained under old barbaric influences—influences that blinded me to the meaning of Japanese drawing. And now, having at last learned a little, it is the Western art of illustration that appears to me conventional, undeveloped, semi-barbarous. The pictorial attractions of English weeklies and of American magazines now impress me as flat, coarse and clumsy.

Hearn devotes pages to telling how he came to recognize that the Japanese artist drew types, not individuals. In doing faces, the artist draws general types, "and often with a force that the cleverest French sketcher could scarcely emulate; the personal trait, the individual peculiarity, is not given."

> Even when, in the humor of caricature or in dramatic representation, facial expression is strongly marked, it is rendered by typical, not by individual characteristics, just as it was rendered upon the antique stage by the conventional masks of Greek actors. . . .
>
> Here it is worth while to notice that the reserves of Japanese art in the matter of facial expression accord with the ethics of Oriental society. For ages the rule of conduct has been to mask all personal feeling as far as possible,—to hide pain and passion under an exterior semblance of smiling amiability or of impassive resignation. One key to the enigmas of Japanese art is Buddhism.

Toward the end of this long essay, Hearn draws this conclusion:

> As reflecting both trivial actualities and the personal emotionalism of Western life, our art would be found ethically not only below Greek art, but even below Japanese. Greek art expressed the aspiration of a race toward the divinely beautiful and the divinely wise. Japanese art reflects the simple joy of existence, the perception of natural law in form and color, the perception of natural law in change, and the sense of life made harmonious by social order and by self-suppression. Modern Western art reflects the thirst of pleasure, the idea of life as a battle for the right to enjoy and the unamiable qualities which are indispensable to success in the competitive struggle.

Musing, Hearn comments on the qualities which Westerners see in faces portrayed by their art.

> Although the facial aspects which really attract us may be considered the outward correlatives of inward perfections or of approaches to perfections, we generally confess an interest in physiognomy which by no means speaks to us of inward *moral* perfections, but rather suggests perfections of the reverse order. This fact is manifested even in daily life. When we exclaim, "What force!" on seeing a head with prominent bushy brows, incisive nose, deep-set eyes, and a massive jaw, we are indeed expressing our recognition of force, but only of the sort of force underlying instincts of aggression and brutality. When we commend the character of certain strong aquiline faces, certain so-called Roman profiles, we are really commending the traits that mark a race of prey. It is true that we do not admire faces in which only brutal, or cruel, or cunning traits exist; but it is true also that we admire the indications of obstinacy, aggressiveness, and harshness when united with certain indications of intelligence. It may even be said that we associate the idea of manhood with the idea of aggressive power more than with the idea of any other power. Whether this power be physical or intellectual, we estimate it in our popular preferences, at least, above the really superior powers of the mind, and call intelligent cunning by the euphemism of "shrewdness."

This was Hearn's way of forming judgments of human character. He was a passionately loyal man, yet given to rage when anyone interfered with his choice of words, as an editor might, or dared to change his punctuation, which for him was fully as important as the words. Actually, to study his punctuation is something of an education in itself—his use of the dash, the semicolon, his leisurely but exact phrasing. Blind in one eye from his school days in England, he was exceedingly shy, and he sometimes went hungry in the United States by reason of his retiring habits and failure to find work that he could perform with any satisfaction. He was, you could say, an impractical man, in the sense that one with high standards and uncompromising habits may be

called impractical. Yet his ability to write well for the newspapers he worked on in America eventually brought him a measure of fame, so that the best magazines would invite him to do travel articles which were widely admired. His sensitive capacities for this work finally enabled him to go to Japan, where he discovered the old Japan untouched for the most part by European influence, and he fell in love with the exquisitely polite and considerate people of the old Japan. He married a Japanese lady and raised a family. He supported the family by teaching school and then in the university of Tokyo, meanwhile writing extraordinary books, including a two-volume study of English literature which may still be the best work of this sort available. His *Talks to Writers,* taken from lectures he gave at the University of Tokyo, was recorded by his students. It is the only book about writing that we dare to recommend. Hearn was born in Greece in 1850; he died in Japan in 1904. He has left to us a rare body of work that is a delight to read. His life, by Vera McWilliams (Houghton Mifflin, 1946), is well worth reading.

COMMENTARY
TIME TO PLANT TREES

IT is time for the rewriting of history in bioregional terms. Past history is known to us mostly as the story of a lot of wars, and most heroes have been conquerors. But now it is becoming known to us that the decline of great civilizations has almost always been marked by the loss of forests. The futurists write at length about what they think is going to happen in the next century, but if they gave attention to what the ecologists have been finding out, they would not have to guess and extrapolate: they would know. A brief article in the Winter 1987 *Gildea Review*, published in Santa Barbara, Calif., by the Community Environmental Council (930 Miramonte Drive, Santa Barbara, Calif. 93109), "Forests and Civilization," by John Perlin, tells the story. The following are extracts from Perlin's book of this title, to be published by Norton in 1988.

> The destruction of the world's forests is one of the major concerns of our age. Each year the world loses about 210,000 sq. km. of primary forest to axe, saw and bulldozer. Thirty per cent of the Amazon rain forest has been destroyed in the last 20 years. Two thirds of Latin America's original forests have vanished, while half of Africa's woodlands have been cut down. . . . In many parts of the developing world these problems have assumed disastrous proportions. Fuelwood shortages plague 57 developing countries, adversely affecting more than a billion people. Torrents from monsoons pouring down deforested Himalayan slopes kill thousands in India and Bangladesh every year. Denuded Nepal's biggest export is its soil, which falls into rivers at an alarming rate and ends up in the Indian Ocean. . . .
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> If the current rate of deforestation continues unabated, most of the world's tropical forests will have disappeared by the year 2000, and with them, many of our world's plants and animals. The loss of all forests globally by that time will create an energy crisis for two billion human beings who will lack sufficient quantities of wood with which to cook their meals and heat their dwellings.

Forests are the material out of which civilizations are constructed.

> Without vast supplies of wood felled from forests, the great civilizations of Sumer, Assyria, Egypt, China, Knossos, Mycenae, Classical Greece and Rome, Western Europe and North America would never have emerged.

CHILDREN
. . . and Ourselves
COUNTRY AND CITY

IN the *Cottonwood Notes*, the Fall 1986 Newsletter of the Malachite Small Farm School, Gardner, Colorado, one learns about an experimental school that has been going for a few years and now has a program that seems unique and worth reporting on. The elevation of Gardner, we figured out from an atlas, is in the neighborhood of about eight thousand feet, so that the agricultural program, concerned with the development of crops, experimental and otherwise, is for what will grow well in high regions. An article in the *Notes* tells the story of the school:

> Malachite Small Farm School officially opened its doors to students in 1982. The first three years were spent formulating a sound and diverse educational program. During these beginning years, students accepted for "internships" were required to select two areas of interest from a list of nine areas. Interns stayed a minimum of three months.
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> Last year [1985] we offered only a Volunteer Program. Work was beginning on the new addition to the school and because so much energy was going into making the 10,000 adobe bricks needed and building the foundation, we felt we couldn't run a formal teaching program at the same time. Volunteers were encouraged to learn the various aspects of building a passive solar adobe structure, to help in the garden and quinoa experiment, or help out in any area that needed an extra pair of hands.
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> At the end of the summer, the staff developed the Farm Introduction Course and carefully planned a teaching/ working schedule for a five-week time period which would expose students to all areas of the farm, thus affording them a basic understanding and overall view of farm life. While living and working on the farm, and combining lectures and "hands-on experience," students are taught Organic Gardening and Experimental Crops (Quinoa), Beekeeping, Philosophy of the Green World, Barnyard Animals, Farming With Horses, Kitchen Arts, and Woodshop.

What is Quinoa? Another article answers this question:

> Quinoa is a drought-tolerant, high protein, cereal grain indigenous to the high altitude mountain areas of South America. Its grain and by-product uses are many, including a variety of food products, animal feed, and industrial and pharmaceutical uses.
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> Malachite's involvement in growing quinoa was originally part of the Agroclimate Development Program of Sierra Blanca Associates, a Boulder-based research group. Sierra Blanca supplied the seeds and technical advisors, both from this country and from South America. During the first three years, Malachite planted a total of nearly 300 strains of Quinoa, monitoring and recording data on soil conditions rainfall, irrigation, virus and parasite activity, cultivation requirements and harvest methods and results.
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> In this fourth year of research, we narrowed our varietal spectrum in an attempt to produce a high-yield, open-pollinated variety from among the most promising strains grown here last year. We concentrated on fourteen selections. Much of this year's seed was selected from last year's crop, including several selections of 407, a highly adaptable Chilean variety; 411, a mixture of several strains that we hoped would cross; and 40, a variety similar to 407. . . .
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> All of our previous quinoa planting has been done in the rich bottom land. This year, six one hundred foot rows were planted on the semi-arid top land as a varietal test. This land is similar to the Andean altiplano—very open, dry and windy, with extremely shallow and rocky soil. Here we studied the effects of the openness and soil depth on the growth and yield of quinoa. Because of the fragility of this windblown plain, we copied techniques from the Andean farmers. The land was plowed only in thin strips, perpendicular to the prevailing winds.

The school farm produces bottled honey and in tins that they market, and professionally made cabinetry. Also sold are cutting boards made from rare and exotic woods. The address is Malachite Small Farm School, A.S.R. Box 21, Gardner, Colorado 81040.

* * *

A writer of about 40, Ben Stein, wondering what kind of impact mass popular culture was having on our youth, decided to go back to high school for a week or so, in order to find out. He

stayed, instead, until the end of the school year of 1985. "I blended into the lime green walls and could see what was going wrong with the teaching process, why the students came out of school knowing so little and why so much of what they knew was wrong." The school where he sat in on classes was the Birmingham High School in Van Nuys, Calif. What is the school like?

> Birmingham is a sprawling complex of one-story buildings originally built as a veterans' hospital after World War II. It draws upon a multitude of economic and ethnic springs. There are children of wealthy Jewish families from the Encino Hills, working-class Wasp families from Van Nuys and immigrants from Afghanistan, black students brought in under the voluntary busing program and Hispanics from East L.A. bused in because their schools have reached capacity.

Stein reports his adventures by date. On Nov. 8, 1985, he visited a 12th grade advanced-placement English class. Before the class started, the teacher, Mrs. Cooper, "a fiftyish intense woman," pulled him aside and whispered urgently:

> "This is what you have to know," she says. "The whole system here is imploding. We have literally illiterate teachers. Literally. We produce no worthwhile product. No product at all in many cases. If things go on like this, in eight or nine years, we're looking at real illiteracy. The teachers don't have any idea what they're doing, so why should the students. . . . There won't always be old-timers like me here. Then what'll happen?"

After lunch he returns to Mrs. Cooper's class. She says to the pupils:

> "Let's talk about structure versus substance. Anyone know the difference?"
>
> A male student says confidently, "I know. Structure reveals who the author is. Substance reveals who the characters are."
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> Mrs. Cooper nods approvingly at this dense ball of nonsense and then moves to explain existentialism. "Extentialism means that man is waiting for the moment to make something great out of it, that life is full of huge possibilities, and man only has to work to make them happen."
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> (By the way, this won the prize for the single wrongest statement by a teacher in my small contest.)

Miss Silver, about thirty, teaches "applied economics." She seems to do the least teaching but gets the most space. On a day when she told the class she didn't feel like teaching she read them an editorial out of the newspaper. It told about T-shirts which said on them "Belsen is a gas," and "Hitler world tour—Dachau, Buchenwald, Britain—cancelled." What, Miss Silver asked, would you do if you saw someone wearing one of those T-shirts? A boy said, "I'd kill him." This boy belonged to a family of refugees from Nazism. But many students declared for the right of people to wear T-shirts of their choice, and some thought these inscriptions were "funny," even a few Jewish students thought that.

One teacher, Mr. Holland, who teaches advanced placement history, is serious about his work, demanding of the students, and they learn a great deal from him because he excites their interest by setting problems based on the Constitution and assigning Supreme Court decisions to look up. They do the work, get excited about it, and they learn.

Mr. Stein ends his long report in a kindly way. He never, he said, saw a teacher sharply criticize a student or address one in an angry voice. He never saw a student leave a class ashamed or humiliated. He never saw a teacher turn away a student who asked for help. "You can wonder at what they taught or did not teach, but you could not seriously question the sincerity of their efforts. And he ends by saying:

> All I could do, in my own way, was two things; I could take snapshots and send them home to the land of adults, where we can look at them and marvel. And there was one other thing I could do: I could and did learn to love the students at Birmingham High School as if they were my own children, to respect all the teachers I saw and to actually love Miss Silver. Whatever the shortcomings of the school and of the people in it, taken day by day and in person, they are as irresistible as youth itself.

Stein's article appeared in *Los Angeles* (a magazine) for December, 1986.

FRONTIERS

Some Good Things Happening

THROUGH the years, MANAS has acquired a number of readers in Canada, and we have noticed from correspondence with these Canadian readers a friendly quality in what they write which might be described as letters not to institutions but to people—reflecting, we hope, our own feeling about our readers. There are of course a lot of bad things happening in Canada, but good things are happening, too, which we learn about from the readers who live there. For example, we recently received a little booklet, *Thoughts from the Woods*, by Robert F. Harrington, and, it turns out, its content is a series of talks the author gave as broadcasts for the Canadian Broadcasting Corporation. They are all unpretentious, engaging, and *good.* In one titled "The Core of the Problem" Mr. Harrington said:

> We rarely think of environmental responsibility as individual responsibility. It is much more convenient for us to think of it in terms of an obligation of society, thus conveniently forgetting that society is made up of individuals—and that each of us is one of those individuals. When we drive our vehicles needlessly, we pollute everyone's air. When we buy extravagantly, we utilize resources that belong to the whole world. When we discard items carelessly along the roads, we make an eyesore for thousands who follow in our path. We cheerfully live with a double standard. Whatever we do is permissible but what the other fellow does may be wrong.
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> A striking thing about the great religious systems of the world, is their common focus on what we now know (and cheerfully disregard) as the Golden Rule. Judaism says, "What is hurting to yourself, do not to your fellow man. That is the whole law, and the remainder is but commentary."
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> Buddhism says, "Hurt not others with that which pains yourself." Hinduism says, "Do naught to others which if done to thee, would cause thee pain." Confucianism says, "Do not unto others what you would not they should do unto you." And Jesus said, "Whatsoever ye would that men should do to you, do even so unto them."

A lot of people today figure that the whole environmental subject is overdone. They are hoping it is a fad that will "go away."

After all: "Bank books are fatter than ever"; "We've never had it so good." A former B.C. politician dismissed the noxious odor of pulp mills by cheerfully saying, "That's the smell of money." "Fresh air may be going out of style, but who needs it?" "Technology can solve any problems." . . .

Surely, as Hamlet pointed out, "Something is rotten in the State of Denmark"—except that we can enlarge now and say something is rotten in the whole world. And what is it now that's rotten? You know as well as I do—it's all of us—individually by the millions—who won't accept our personal responsibility. . . .

It is a most difficult thing to do, to pick oneself up by the shoelaces, change the entire pattern of life, and set off onto a conservative, dedicated pathway. But it is probably the only solution. If all the irresistible forces that mankind has set in motion eventually collide with the immovable object created by the fixed laws of nature, there will indeed be an unspeakable catastrophe. . . . Human intelligence is adequate to return man to the harmony by which he must live. But, character can never be borrowed in a crisis, and that is the question. Is there enough character to solve the moral problem that lies beneath all the other problems?

From another broadcast:

The sheer quantity of roots sustaining a quite ordinary plant may be almost beyond comprehension. H.J. Dittmer once did a study of a single plant of winter rye. It was an ordinary plant, some twenty inches high, comprising a clump of eighty shoots. But, its root structure was remarkable. First he found that there were 143 main roots, having a combined length of 214 feet. From the main roots, secondary roots branched off, and these were over 35,000 in number and had a combined length of nearly 18 thousand feet. The secondary roots branched to form tertiary roots, and there were over two million of them, with a combined length of nearly six hundred thousand feet. They branched still another time to form eleven-and-a-half million smaller rootlets, with a length of nearly a million-and-a-half feet. When we totalled the whole thing, it was to discover that the single rye plant had 14 million roots which extended a distance of about 380 miles (when added together)—or, more than the distance from Calgary to Edmonton, and back again.

In still another of his talks, Harrington remarks:

> There was a time when men who wished to become educated sought to be admitted into the presence of great teachers. It is questionable whether our present lock-step system of education, with diplomas, certificates, degrees and the like will ever be able to replace the Ciceros, Socrates and Thucydides of past generations.
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> However, looming head and shoulders above all the immortalized teachers of history, is that grand master teacher we refer to as Nature. Some refer to Nature as Mother Nature, and the term is not so far out as might be thought, because we are all indeed the children of nature. . . . As Walt Whitman commented, "After you have exhausted what there is in business, politics, conviviality and so on—have found that none of these finally satisfy, or permanently wear—what remains? Nature remains."

We return to this country, to the December-January issue of *National Wildlife,* for a fascinating account of the cycles and rhythms in plants and animals by David M. Schwartz. He begins by saying:

> Observant gardeners have long noticed that different flowers open and close their petals at different times of the day. So precise are these floral rhythms that the eighteenth-century naturalist, Carolus Linnaeus, used them to devise an ingenious circular clock garden. He planted each of 12 wedge-shaped areas with flower varieties that blossomed at different predictable hours, from 6 A.M. until 6 P.M. Linnaeus could tell the time of day simply by looking out his window.

Schwartz devotes three pages of *Wildlife* to the rhythms pervading all nature, showing that there is some kind of natural "clock" in all organisms, governing their behavior. Biologists want to know whether it is external—changes in light and temperature—or mysteriously internal, determining intervals by means we hardly understand, without regard to external influences. There is evidence on both sides, showing that external influences such as day and night and the seasons may act as triggers, but that the internal clock mainly controls the responses of the organisms. The inward cyclic clock determines countless biological processes, even to affecting the time of day when medicines do the most good to the human body. Such discoveries make a long step toward understanding natural processes.