Honors

ON NURTURE AND EXPLOITATION

BY

SAM HAINES

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INTRODUCTION

The field of cultural criticism is not a new area for literature. As far back as the written word goes, writers have warned humanity of it's folly and offered various methods of salvation, some of which were useful, some not.

Times of cultural unrest naturally spawn more writings critical of culture than is produced in times when culture is restful. In the U. S., for example, the banking panic of 1907 stirred unrest, particularly among city dwellers. A sizeable back-to-the-land movement formed and a considerable amount of literature was produced that touted the simple, satisfying, country life as compared to the uncertainty and confusion of the cities. One of the more prominent of this type of writing was Bolton Hall's A Little Land And A Living, wherein the author presented a plan for self-sufficiency based on small, family farms.

The crash of 29' resulted in another flight from the cities and another out-burst of counter-culture literature that offered a number of alternatives to the panic of the by-now-large metropolitan areas. Books such as This Ugly Civilization and Flight From The City, both by Dr. Ralph Borsodi, pointed to the disastrous side effects of a society based on consumerism and concentrated industrialism. The former of these two books, published in 1928, was used by some city governments in setting up self-help programs for the unemployed during the depression years.

WW II instigated another turbulent period that propelled yet another back-to-the-land movement with it's accompanying writings. One of the

more practicle of these was Ed and Carolyn Robinson's The Have-More Plan (1943) which is still very much in demand today, being in it's tenth printing.

Now, in the late 70's, the evidence points that society is again going through the same cycle. Writers such as Toffler, in his best seller Future Shock and Buckminster Fuller in Utopia Or Oblivion tell us that modern society is changing to fast and mis-using our run-away technology at a rate that insures self-destruction of the human race should it continue on the present format. Most of the social-indicators show that we are in a period of unrest. Unemployment and housing problems plague the cities while the farms have a manpower shortage. Run-away inflation and a spiraling tax structure keep the average citizen on the brink of financial ruin.

Again, there is a movement back to the land, again there are copious amounts of literature to tell why, when, where, and how to do almost anything yourself. Books and periodicals dealing with self-sufficient lifestyles are being sold in unprecedented numbers.

Wendell Berry, in his excellent book, The Unsettling of America-Culture & Agriculture (1977), sees the problem in this way: there are two mentalities at work, one is that of the exploiter, the other being that of the nurturer. The goal of the exploiter is wealth, while that of the nurturer is health. The exploiter tries to obtain maximum short-term benefits from any endeavor, with little or no regard for long range impact, while the nurturer, on the other hand, attempts to temper endeavors with an eye toward the future.

In farming, for example, the role of the exploiter can be seen in the giant agri-business that has become the way of American farming. The destructive practices being used are designed to extract the largest possible ~~time~~ crop, with no thought of overall environmental impact.

The nurturer can be seen in the small subsistance farmer that attempts to obtain a comfortable living from the land without affecting it's capacity for indefinite production.

A number of recent writers suggest that many of the problems facing today's society could be remedied by a shift to a more rural culture that would be based upon the philosophy of self-sufficiency. This paper explores some of the more prominent of these authors and deals with the idea of a shift to one designed to nurture.

SHELTER

The natural order of things is diversity. When left to its own devices, any area develops a natural balance of extremely varied plant and animal life which interact with each other in a manner that contributes to the overall good of the environment. That is, unless one of these animals is man. Man has made the decision to conquer, rather than to cooperate with nature. In the majority of cases, homes are designed to provide maximum comforts, with the least possible expanditure of effort by the occupants. Instead of the energy being expanded by the ones that recieve the benefits (occupants), the average modern dwelling exploits nature by grossly inefficient use of finite resources, instead of practicing nurture in some form that would allow these resources to be maintained. A prime example of this is the use of coal. It would be much more in line with nurture to burn the coal in the home for heat, than to use it to fire a boiler in some distant plant that generates electricity, which must be transmitted to the home by power lines which show a high loss of energy through transmission.

The nurturer observes nature and tries to apply the principals learned to his/her own well being. The expliter uses any method available to fulill his/her needs, regard less of the total impact on the enviornment.

The movement of the masses from the country to the city is another example of man's failure to follow the teachings of nature. While nature displays a system of specie diversity, man has chosen to gather into intensely concentrated urban areas which sit like splotches of blight on the landscape, destroying at an alarming rate the very resources that man depends upon for survival. Society has opted to consume rather than to contribute.

As man became more affluent, his shelter became more inefficient. From cave dwellings, which are extremely energy efficient, he went to houses of sod, stone, or one made of logs. As the human race devised more ways to conquer nature, it moved to the more fashionable, but comparatively inefficient frame dwelling. Instead of designing homes that would have nurtured the enviornment, man has chosen to exploit as evidenced by that modern miracle of consumption, the modern American home.

As Berry (1977) points out, the modern home is not built as a response to the needs of the inhabitants or the needs of the local ecology, but are instead designed to reflect the affluence and the social status of those who dwell inthem. Since each social level is comprised of many individuals, houses have been cloned to the point that, from inside, it is almost impossible to tell them apart.

The modern American home is designed forconsumption. Poor design and lack of adequate insulation combine to display the least efficient use of energy possible. Homes are stuffed with non-essential devices and the humans that live in them are programed for consumption.

The American people no longer live where they work. Not only does this seperate living frommaking a living, it also leads to further consumption and destruction of the enviornment by the massive transportation systems used by the commuters.

Modern homemakers no longer produce useable food products in the home. In many instances, meals are not even prepared there on a regular basis. There can be very little satisfaction in warming up TV dinners or in serving foods obtained from a fast food outlet.

The entire chain of circumstances that surround a home based on the natural cycle has been broken. As suggested by Berry (1977), the home maker no longer is a home maker, but a consumption specialist. The expertise of the present home maker lies in the area of economics more than in food processing and production. Food is increasingly produced, processed, and packaged outside of the home. The effect on marriage can be seen in the following quote from Berry:

> "We are familiar with the concept of the disintegral life of our time as a dismembered cathedral, the various concerns of culture no longer existing in reference to each other or within the discipline of any understanding of their unity. It may also be conceived, and it's strains more immediately felt, as a dismembered household. Without the household - not just as a unifying ideal, but as a practical circumstance of mutual dependence and obligation, requiring skill, moral discipline, and work - husband and wife find it less and less possible to imagine and enact their marriage. Without much in particular that they can do for each other, they have a scarcity of practical reasons to be together. They may like each other's company, but that is a reason for friendship, not for marriage. Aside from affection for any children they may have and their abstract legal and economic obligations to each other, their union has to be empowered by sexual energy alone." (pp. 116 - 117)

He futher suggests that as it becomes easier and more simple to keep house,the person so involved became increasingly bored. The only relief for this boredom appears to be increased consumption:more T.V.'s,more nights out,more complex labor saving devices,more clothes,more beauty aids,more,more,more. The wage earner,in the mean time,must earn an ever-increasing supply of money to maintain the household at its ever-increasing rate of consumption. The wages are earned at a location that is physically and psychologically seperated fram the place of dwelling. The wage earner has been reduced to just that, an earner of wage. For these,the home is no longer a place to live and to help make a living,but just a place. The wage earner seeks to relieve boredom while not at work by increasing recreation. This results in futher consumption and exploitation of resources.

The same problems that beset adults also effect children. T.V. and outside institutions have,for all practicle purposes, taken over child education. With all the labor saving devices, and since food production is no longer practiced in the home, there are practically no chores to teach responsibility. Sinse no productive animals are raised in and around the home,the youth cannot develop the respect for the natural process upon which the food-chain depends.

With no meaningful purpose in the home, children become bored, and seek to alleviate this boredom by any means available, some of which have dire consquences. Children are no longer an addition that tends to make the family a more complete, smoother functioning unit but are felt more as a financial and social burden that must be endured.

Older citizens are treated as excess baggage. Instead of remaining in the home, where full utilization of their talents, both physical and mental, can be accomplished, they are increasingly bundled off to various institutions where they live out their days watching television or engaging in some meaningless activity thatwas designed to relieve boredom, rather than to be productive.

The gathering together of the human animal with it's exploitative mentality into large mono-culture conglomerations have predictably produced the problems of all monocultures. One of the worst of these is disposal of the vast amounts of waste that such a society spawns. It is becoming increasingly harder to find any body of water that does not contain possibly harmful pollutants. Roadways are an eyesore. Once beautiful wooded areas are saturated with throw-away containers that do not self-destruct. Garbage and other organic waste that could be used to nurture the planet, are disposed of in ways that further pollutes water supplies which necessitates further exploitation to produce clean water for consumption. It seems as if the only area in which technology has failed to introduce planned obselescence is that of the disposable container.

"Earth provides enough to satisfy every man's need, but not enough for every man's greed."

Gandi

Shelter

Suggested Alternatives

Thanks to the vast amount of knowledge that is available today, there appears to be no dearth of alternatives to the present situation. Of course, this adds to the problem. If only one or two avenues were available, all resources could be concentrated in these areas, which would increase the chances for successful application.

For the school of thought that proposes peaceful co-existence with nature, there seems to be a very clear underlying theme, SIMPLIFY . Nurture instead of exploit. Much current (and not-so-current) literature reflects this trend. Wisdom and reflective thinking leaves little choice. Thoreau (1854) summed it up so admirably:

> "Most of the luxuries, and many of the so-called comforts of life are not only indispensable, but positive hindrances to the elevation of mankind. With respect to luxuries and comforts, the wisest have ever lived a more simple and meagre life than the poor." (p. 14)

Of course, most people do not desire the very austere existance that Thoreau experienced at Walden Pond. Even Thoreau did not choose it as a permanent way of life, but rather as a two-year experiment in an enviornment stripped of non-essential items. He lived in a shanty built from salvaged wood and earned money by infrequent episodes of day labor. His diet was very basic. In this way, he was able to experience nature in a manner incompatible with the exploitative mentality of society. If not his best writing, certainly his most popular was produced during this two year period.

The late E. F. Schumacher (1973), the popular economist, calls for a return to "smallness", a re-distribution of the masses from the cities back to the country. He further suggests a complete restructuring of technological thinking that will allow the present runaway technology to be decelerated to a more appropriate level. He labels this as intermediate technology. This would shift the emphasis of technology away from the more-is-better, mass-production philosophy that is so evident today. This would allow the rise of small community-oriented industry that would provide employment in the many small communities that would be necessary to support the small farms of the re-distributed populace. This would also stimulate growth of cottage industry, wherein a product is produced in the home to provide or supplement income. Technology could be directed at producing better, longer lasting products that were more compatible with the enviornment than those presently produced. Technology could concentrate on nurture rather than exploitation.

As the populace is being redistributed, new shelters must be constructed. These shelters should take into consideration the lessons provided by nature, rather than to seek to dominate it. Overall enviornmental impact of new dwellings must be evaluated as thoroughly as possible. Homes can be constructed making use of natural surroundings, such as building a semi-cave in an existing hill, with a sod roof and utilizing the natural insulating characteristics of the surrounding soil, supplies of such things as water and firewood should be readily available to avoid energy waste in transportation.

Lower animals, when given the opportunity, live as close as they can to their shelter and food supply so that they can live comfortably with minimum expenditure of energy. Man should take heed, and should aim at peaceful interaction with nature rather than domination.

The above plan certainly sounds reasonable, as far as long range plans go, but what about in the meantime? What can be done to provide adequate shelter while decreasing the demands on already over-burdened ecology?

There appears to be a trend toward a more appropriate technology in shelter that has already made tremendous impact on the housing industry. This trend was no doubt at least partially a response to the recent fuel shortage and is a typical example of man adapting to the existing conditions. The fuel shortage and coal strikes serve as an indicator of the future when these supplies become less available. It is fact that these supplies are finite and will continue to diminish in supply until shere cost shall dictate that we use the remaining supply intelligently. The trend is toward more energy efficient homes. Tax breaks are given to those who build homes with what is considered adequate insulation. As fuel supplies diminish, no doubt the definition of adequate insulation will also. The point is simple. If less energy is available, more efficient use of the remainder is indicated.

Wade and Lwenstein (1977), in their recent book on energy-efficient homes, state that small, box-like houses which are energy efficient are not selling well. They blame design inefficiency for placing commercially

marketed homes out of the reach of eighty-five percent of the populace. They further say that failure to implement cost-saving techniques have been the fault of unions and unwise building codes.

Helen and Scott Nearing discovered the answer to shelter, and many of the other problems that plague society, many years ago, and documented their discoveries in their excellent books, Living The Good Life (1954). This writing tells how they both abandoned promising academic careers and moved to the Vermont out-back in order to develope a life-style that was in harmony with nature. They utilized indigenous material both for shelter and income. Cash was raised through maple syrup production, ~~a good production~~, a good example of cottage industry. Organic methods of gardening to nurture the local ecology. They developed a method for building from stone which was abundant in the area. In their own words:

> "We chose stone for several reasons. Stone buildings seem a natural out-cropping of the earth. They blend into the landscape and are a part of it. We like the varied color and character of the stones, which are lying around unused on most New England farms. Stone houses are poised, dignified and solid-sturdy in appearance and in fact, standing as they do for generations, they are cheaper to maintain, needing no paint, little or no upkeep or repair. They will not burn, they are cooler in the summer and warmer in the winter." (p. 47)

As with others who have made similar experiments, the desire for a shelter that was more in the natural order of things, revealed itself as part of a change in thought and action that led to a more harmonious relationship with nature. The Nearings decided to practice nurtue rather than exploitation. The results are apparently gratifying. Tody, with Scott at 93, they are both still actively engaged in self-sufficiency and due to their popularity, have hundreds of guests each year who come to study there achievments.

A dwelling should be the reflection of an entire attitude, not just a single thought. It should be developed by need, not to display status. It should be constructed so the minimum energy is expended in maintenance and constructed so as to make minimal environmental impact.

Wendell Berry (1977) supports this in his reccomendation for a return to small farm culture. Although his emphasis is on agriculture, he supports Schumacher in his call for a rural economy based on as many people as possible own five to ten acres of land, and practicing a self-sufficient life style by producing at home, rather than consuming over a distance. Small communities, with much cottage and small industry would replace the large industrial metropolitans of today. What he reccomends is a culture designed to nurture rather than to exploit.

Food

The entire direction of the culture depends directly on agriculture methods. At least that is the impression given by such writers as Thoreau, Berry, Schumacher, Erlich and others. There seems to be substantial support for this theory. It is hard to determine which is the cause and which is the effect. Does culture determine agriculture practice, or does agriculture practice determine culture? There is no answer necessary to this question. The issue is: what, if anything, is wrong with present practices, and if so, what can be done to correct the situation.

It is hard to convince anyone that modern American agriculture has any serious problem that connot be solved through technology. As a matter of fact, technology probably could correct most, if not all of the problems were this technology aimed at nurture, but not with the present emphasis on exploitation.

The fallacy that nature can and should be dominated is more evident in agriculture than in any other area. The "get-big or get-out" philosophy that came from unwise use of technology was the prime mover that propelled the masses from a rural to an urban culture. Man again chose to exploit. As Wendell Berry (1977) says:

> "Bigger tractors become necessary because the compacted soils are harder to work; and their greater weight further compacts the soil. More and bigger machines, more chemical and methodological short cuts are needed because of the shortage of manpower on the farm - and the problems of overcrowding and unemployment increase in the cities. It is estimated that it now costs (by erosion) two bushels of Iowa topsoil to grow one bushel of corn. It is variously estimated that from five to twelve calories of fossil fuel energy are required to produce one calorie of hybrid corn energy." (pp.10-11)

And the problems continue to increase. The number of farms is still decreasing, and the size of farms is expanding. According to Dr. Fred A. Mangum, extension agronomist at North Carolina State University (Progressive Farmer), North Carolina farms are 83 percent bigger than they were just 25 years ago. The number of farms have declined from 301,000 in 1935 to 115,000 at present. The state is losing farmland at the rate of 100,000 acres each year to other uses.

Another problem of mechanized agriculture is waste. Machines just do not harvest as cleanly as can be done by hand. Corn and other types of mechanical harvesters often leave a sizeable portion of the crop on the ground. Most mechanical vegetable pickers can only make one pass through the crop, then the plants are plowed under and another crop planted. If the season allows, the wasteful harvesting procedures are compensated for by placing increased acerage under cultivation. The hilly and so called marginal land that was productive in an age when more appropriate technology was applied, has been abandoned in favor of large open areas that are more accessible to the gigantic equipment being used. Fence rows and ditch banks that once prevented leaching away of the topsoil by erosion have been systematically destroyed to allow the large equipment operating room.

The above listed practices and the massive use of non-discriminating insecticides have upset the delicate balance with which nature controlled it's own pests in a more sensible society. More and more pesticides are needed as natural controls are destroyed. These natural controls, which consist of such predators as praying manti, lady bugs (which feed on aphids), birds, toads, and many others have fallen victims to the poisons used to control the pests that attack the crops grown by man. In 1970,

America used more than 500 million pounds of pesticides on it's crops. (Yepsen, 1976). That is roughly two pounds of deadly pesticide for every man, woman, and child in the entire country. Berry (1971) points out that the germs removed from our food by an advanced technology have been replaced by poisons or a careless one.

Paul Debach, Professor of Biological Control at the University of California in Biological Controls By Natural Enemies, likens the use of pesticides to the use of narcotics by humans. In either case, immediate goals are reached, but dosage size and frequency must be elevated as tolerance or resistance develops. This continues until a habit is developed. Once the habit is established, only drastic measures can reverse the process.

Farms that once thrived under the hand of the nurturer, are falling into ruin by the hands of the exploiters. Agri-powers who live in the city and control large farming empires, have lost touch with the land and are primarily motivated by the quickest way to make a profit, with little or no thought of the overall impact.

Jerry Belanger (1973) is among the many writers who point out the problems incurred with mono-culture - planting vast amounts of acreage to a single crop. This method has been sold to the public as progress and efficiency, while in fact, the havoc created by this artificial environment far out weighs the immediate gains. The monoculturist finds that insects and diseases that attack his crop are not controlled by their natural enemies because those enemies require a different environment than the artificial one he has created. This requires even further use of

possibly hazardous chemical controls. The huge open areas with natural barriers destroyed, leave the topsoil vulnerable to erosion by both wind and water. Also, as mentioned before, the gigantic equipment required to do this type of farming further compacts the soil which encourages run-off. Game habitat is destroyed, which further upsets the natural balance. The exploitative nature of mono-culture is obvious to the most casual observer. Even the Bible warns against it:

> "Woe to those who add house to house and join field to field until everywhere belongs to them and they are the sole inhabitants of the land."
>
> Isaiah 5:8

Suggested Alternatives

If the assumption is made that the direction or fate of the culture depends upon agriculture methods, and if there are obvious faults in the culture, then a simple solution would be to return to or devise more appropriate agriculture technology.

There is a persistant move afoot to return agriculture to methods more compatible with the ecology. A variety of periodicals are being printed that support and provide information for small, self-sufficient farms that use organic (natural) methods of food production. The sale of home canning supplies have sky-rocketed. Small farming equipment such as roto-tillers and hand tools have enjoyed increased popularity. The most popular of the periodicals is Organic Gardening and Farming, a monthly which claims over one million regular readers and as the title suggests, promotes food production without the use of man-made chemicals.

Sir Albert Howard, who is thought of by many as the patron saint of the organic movement, said in 1940:

> "The main characteristic of nature's farming can therefore be summed up in a few words. Mother earth never attempts to farm without livestock; she always raises mixed crops; great pains are taken to preserve the soil and to prevent erosion; the mixed vegetable and animal wastes are converted into humus; there is no waste; the processes of decay balance one another; ample provision is made to maintain large reserves of fertility; the greatest care is taken to store rainfall; both plants and animals are left to protect themselves against disease." (p. 56).

Sir Albert was a student of F. H. King who published a book in 1911 that explored peasant agriculture, primarily in the orient, where families have extracted a living from relatively small areas for generation after generation by use of methods that nurture the land instead of exploiting it. This people, following the example of

nature, return all waste, including human excrement, to the soil which replaces the nutrients removed by crop production. They also follow crop rotation and diverseification with which methods they are able to utilize scarce crop land to it's fullest extent without destroying it. Sir Albert expanded upon these ideas with 30 years of research on his farm in England, whereupon he published what has become the primary reference of the organic movement, An Agriculture Testament (1940).

There are some encouraging indicators that the American government may be becoming interested in the preservation of small farms. Georgia Senator Herman F. T lmadge was reported by Countryside (another periodical based on the organic movement), as saying:

> "Although about ninety percent of the nations farm products are produced by ten percent of the U. S. farmers, the institution of the small farm must be preserved. While corporate factory farms may make sense to economists, they make little or no contribution to the health and well-being of our rural communities. Local ownership has the merit of providing farm owners and farm families who spend their money locally, help keep the town viable and care about the schools, the parks and the people." (vol. 62, Feb. 1978, p. 17).
>
> The value of small farmers to this nation far out weighs any costs they may impose on the federal budget. Their demands are far less than those of the inner city, where the problems of concentrated poor and moderate income families grow exponentially all out of proportion to the actual number of people involved." (vol. 62, Feb. 1978, p. 17).

It would appear as if some program should be implemented by government to promote interest in the small family farm. The Senators point on the demands of the small farmers on government as compared to the city dweller is a good one. The small farmer tends toward self-sufficiency whereas the city dweller does not have this opportunity and must rely

on government for much assistance.

The "hope freaks" of the sixties were the source of another movement in the direction of living lightly on the land. This group spawned numerous communal type situations where young, dedicated (albiet uninformed) persons attempted to make a direct transition from an exploitative style to one designed to nurture. Most, if not all of these did not work out, probably due to a failure to change basic beliefs as quickly as values were changed.

A lot of these communal-type experiments were based on the pure fictional concepts presented by B. F. Skinner in Walden Two. These were doomed to failure by the simple relationship of fact to fiction. Skinner failed to allow for the unique and innate qualities of being that make up the human psyche.

Another group followed the example of Louis Bromfield in Malabar Farm (1947). This group had a more concrete base. This writing tells how the author bought some ravaged farmland in north-central Ohio at the start of WW II, and established a group that survived by methods that were designed to nurture the environment. Bromfield's ideas on agriculture followed basically along the lines of Sir Albert Howard, but he also brought up an interesting angle to the organic method of food production:

> "The whole theory of the ability of healthy plants grown in organically balanced and complete, mineralized soils to resist disease and to some extent "Attacks By Insects" (italics mine) is not altogether new, either in the field of research among highly skilled market gardeners or among intelligent amatuers, but it is largely unknown in general agriculture. The theory of putting into the soil the means of resistance rather than applying it externally by dusts and sprays is much more revolutionary and comparatively little research has been done along these lines." (p. 83)

Again, man has chosen to exploit by dominating nature by the use of chemicals instead of using the technique of nurture by developing the innate characteristics of the soil.

The "hope freaks" are gone. In their place is a hard core of back-to-the-land types whose number can only be guessed at. This group has been responsible for a number of books related to a more sensible life-style, also several periodicals. The most popular of these is The Mother Earth News, whose editors have this to say regarding their publication:

> "- - - a bi-monthly publication edited by, and for, today's turned on people of all ages. The creative ones. The doers. The folks who make it all happen. Heavyemphasis is placed on alternative life-styles, ecology, working with nature and doing more with less." (26, March, 1974 p. 5)

This periodical gives a lot of practical advise, and is presented in a "folksy" format that is not only informative, but interesting as well.

About the time that Sir Albert Howard was composing his book which was to become the theoretical cornerstone for the organic movement, Ed and Carolyn Robinson were compiling a blueprint for a total lifestyle based on small farming for self-sufficiency. This book was called The Have-More Plan and has stood the test of time among the many books that are available on self-sufficient living. It has been said that if only one book could be taken on a move from the city to the country, this should be it. It provides consise, basic information on all phases of rural lifestyle. The authors close with a provacative call for a re-building of America - so that every family that wants to can own a home and a little land!

It is not reasonable to assume that the American mentality will

shift instantaneously. What is more likely is; rising food prices and lower food quality will result in food being produced and processed in the home. Where good sense has failed, economics will succeed. Like the victory gardens of WW II, home gardens will continue to increase in size and number until their effect can no longer be denied.

The flexibility of nature allows the change from exploitation to nurture to be a gradual one. Even a city apartment dweller can raise a few vegetables in a window box. Most experts agree that all of the vegetables required for a family of four can be grown on a forty by forty foot plot, and it doesn't take much room to raise a few rabbits and chickens, or even a family of goats.

The taste and nutritional value of modern foods should lend inertia to the return to more natural methods of food production. Vegetables can be produced at home that are developed for nutrition and taste, rather than those developed by modern agri-business which must experience long storage and rough handling. Super market tomatoes are tasteless, pale, mushy blobs, that cannot compare to a succulent, bright, fresh tomatoe from a home garden.

There does not appear to be much choice if survival of the human specie "as we know it" is to be considered. Man can continue to exploit the planet. Man can continue to be a consumer, by making, as Berry (1977) says:

> "The function of the body to that of a conduit which channels the nutrients of the earth from the supermarket to the sewer." (p. 64)

Or man can choose to nurture.

EDUCATION

If a change in thinking is necessary to slow down man's headlong rush to destruction, the education is a logical place to institute this change. Education should probably not be blamed for instituting the exploitation mentality, but it can certainly be held responsible for perpetrating it.

Jerry Belanger (1973), commenting on modern education as compared to the "homespun" variety, says:

> "In this age of specialization, where one man might know everything about a specific step of manufacturing process but have no idea what else is involved or even to what final use the product is put, it's novel and challenge to be a homesteader. Since the homesteader wants to be as independent and self-sufficient as possible, he must aquire and develop a wide variety of skills. This might just be one of the attractions of homesteading.
>
> Many people are tired of learning to be doctors, engineers, mechanics, or what have you, then spending their lives in the narrow slots their careers carve out for them. Certainly life can be much more interesting when you must be a gardener, home economist, veterinarian, carpenter, small engine mechanic, nutritionist, dairyman, poultryman, sheepshearer, and butcher. Our forefathers were all these things, but I know of no course of education that prepares modern man to be such a self-sufficient generalist. Is this second education any less important than the first? A person can be as enriched by knowing about the amazing activity taking place in his beehives as he is by studying a required literature course. (And his knowledge of bees, if put to work, will be rewarded with a supply of honey.)
>
> A good formal education is by no means wasted in the country. But if a simple peasant from the Middle Ages could get along better in our modern civilization than our highly trained, highly educated, highly specialized contemporaries could get along in his simple environment - have we really come such a long way? (pp. 15-16)

The move to the cities with subsequent breakdown of the nuclear families, is responsible for the education system of today. As the home became more of a place to consume, rather than to produce, and the wage earner found employment some distance from the home, as both parents began to be more and more away from home in order to pay for labor-saving devices, as

children had less and less meaninful tasks in the home, the interdependence on family members as a unit slowly disappeared. The responsibility for education shifted from the family to the televisiion and outside institutions.

The meaningful interplay between mother and child in learning such vital things as the alphabet has been replaced by children's television programs, interlaced with frequent commercials tnat urge consumotion. It could hardly be expected to do otherwise, as television is supported and controlled by the giant conglomerate interests whose very survival is geared to consumption and planned obsolescence.

Outside institutions, of formal education whose only show of progress have been more inovative ways to teach the same questionable material, find themselves in a somewhat ridiculous position in todays industrial society. In a culture where plumbers, who provide for removal of man's lowest function, receives higher pay than professors, who supposedly instill thinking, mans highest function, the education system can hardly be taken seriously.

Wendell Berry (1971) saw his own extensive education this way.

"---And as I think of it,school was a distraction. Although I became, among other things, a teacher, I am skeptical of education. It seems to me a most doubtful process, andI think the good of it is taken too much for granted. It is a matter that is overthorized and overvalued and always approached with too much confidence. It is, as we skeptics are always discovering to our delight, no substitue for experience or life or virtue or devotion. As it is handed out by the schools it is only theoretically useful, like a radomly mixed

handful of seeds carried in one's pocket. When one carries them back To ones own place in the world and plants them, some will prove unfit for the climate or ground, some are sterile, some are not seeds at all, but little clods and bits of gravel. Surprisingly few of them come out to anything. There is an incredible waste and clumsiness in most efforts to prepare the young. For me, as a student and as a teacher, there has always been a pressing anxiety between the classroom and the world: how can you get from one to the other except by a blind jump. School is not so pleasant or valuable an experience as it is made out to be in theorizing and reminissing of elders. In a sense, it is not experience at all. but a hiatus experience."

(p.36-37)

As society turned schools into a way to keep children occupied until they were old enough to compete in the job market, the quality of education dropped. Quality and quantity are usually inversely proportional, and since education also has adopted the more-is-better theory, quality has dropped.

Nurture is not being applied in education. Instead of being a place where students can obtain knowledge and skills that would allow them to live in harmony with their environment, the underlying theme in public education seems to be the aquisition of material wealth. Students are being indoctrinated with the exploitative philosophy instead of learning nurture.

Possible Alternatives

Education could be the tool used to bring about the social change that appears to be so urgently needed. To be effective as such, the present system will have to be overhauled, and the new model will have to be based on more realistic principles. As the problems in the present system become more apparent, other methods are beginning to appear.

Buckminster Fuller (1969) suggests television as the ultimate educational tool. It surely appears to be a legitimate thought. Television has educated the masses to think that they need an endless variety of gadgets with built-in obselescence, and has been the scource of such obviously paradoxical beliefs that Americans should live the life of ease and leisure, and yet be slim and healthy (Berry, 1977)!

To just turn to television as the primary paradigm of education without changing the basic concepts upon which education (and television) is based would probably not change things very much. If education were to re-align itself to the idea that it should teach man to achieve maximum happiness while making minimal environmental impact, television could be used to teach the skills necessary for a self-sufficient life style. This would be of tremendous aid if the ideas of Schumacher and Berry are followed and society re-aligns itself to a rural economy. Many skills necessary for self-sufficient living have been lost in the industrialized society.

Another possibility is the Foxfire experiment. Elliot Wigginton came to Rabun Gap, Georgia in 1966, fresh from five years at Cornell, with an A.B. in english and a M.A. in teaching. He took a job teaching ninth and tenth grade English and geography and began to teach in

the methods that he had been trained in. After six weeks of frustration, Wigginton decided to abandon conventional methods. He threw out the text books and began the project that his students later named Foxfire. All of the students became involved in the publication of a small magazine which featured local folkways and carried a poetry section. The students were totally involved in the entire production. Students contacted long time rural residents and interviewed them concerning methods and ideas of rural life. Many skills and formulae which might otherwise have been lost, are now recorded for posterity. Classroom boredom, so evident in the past, disappeared as the students got involved. The operation continued to grow and recently they published their fourth book, Foxfire Four. The magazine has subscribers in fifty states, and has been favorably reviewed by such publications as Saturday Review, New Republic, National Geographic School Bulletin, Scholastic Scope and Whole Earth Catalogue. (Wigginton, 1972)

This intriguing approach could, with very little modification, be applied anywhere. There are many benefits readily apparent, not the least of which is the idea that it takes a student away from the propoganda of the television, and places them into contact with the real world where actual methods of living could be observed and evaluated.

Huxley (1962) gives another somewhat similar to the present education methods. The children on his Utopian island of Pala were taught by combining education with recreation. Math was taught while playing at cards and similar games, rather than being memorized in abstract fashion from boring and often confusing school books. Biology was taught while on hikes and camping excursions, rather than by rote learning methods employed by a more "conventional" society. This idea certainly has

merit and deserves more development.

A return to a rural based populace that was designed to nurture rather than to exploit would no doubt employ some of the principles discussed here in addition to having the flexibility to employ other methods and material as local situations would dictate. One thing appears certain - a change is in order!

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