

## A Fantasy

Predicting the future is hazardous. Too many variables must be taken into account to be highly accurate. Utopian schemes that seemed rational in the past become the height of folly when present standards are used to critique them. But it is necessary to look ahead and plan for events that may or may not take place. We have always done that and, hopefully, we always will. In the last chapter we predicted some of the dire things which probably would come about as a result of continued population growth. But they are not the things that will be; just the things that might be. It is possible for the future to be quite a bit rosier than it would if those dire predictions were to come true. A smaller human population on the earth would open the door to alternatives which are more pleasant, logical and creative.

We will try to envision a world in which the population is 10 percent of our present population. The United States would have 25 million people in this future rather than 250 million. China would have 110 million people; India would have 90 million. The total world population is now approximately 500 million people. The population is half of what it was in 1830. Actual statistics for the populations of the countries mentioned would probably be different, but we are only extrapolating from present figures. It is reasonable to assume that settlement would be quite different from that at present.

In this best of all possible worlds there is an abundance of wilderness, wild animals and plants. Diversity of species is the result of natural trends. The fear that our human encroachment would lead to declining diversity is now unfounded. The wilderness has reclaimed many areas which were used for the expansion of the human population. There are a lot of "ghost towns" which are being reclaimed by nature. There are ducks unlimited. Gorillas, panda bears, grizzlies, snowy owls, whales, dolphins, elephants, rhinos and most of the species whose extinction seemed imminent are doing well. We do not require their lands for our activities, so they are able to thrive in their natural habitats. The lesson we have learned is how not to destroy habitat. Because we now have more than enough land for our activities, it is easy to keep from encroaching on those lands which are best suited to the needs of the formerly endangered species. On a more somber note, however, those species which were completely lost are gone forever.

Humans also are able to thrive. Overcrowding is a thing of the past, along with the natural concomitant features of a society which crowds numbers of people into small spaces. There is less competition for resources because resources are plentiful. With the lessening of competition, many undesirable social factors are ameliorated. People are able to support themselves. Social problems such as alcoholism and other drug use, crime, child abuse, and other forms of mental illness have declined, as people are aware that they are not superfluous to the social and economic structure. People are necessary to the maintenance of the society, and their sense of self-worth reflects that fact. There is a sense of purpose which underlies the entire social structure from the family to the global community, and each individual is aware of his or her contribution to the community. With the reduction in competition there is less conflict over the allocation of resources, and peace is a reality. Indigenous peoples have little to fear from the rest of human society because we no longer feel the necessity to trample them in the rush to develop resources. Diversity of cultures is easily maintained, due to an absence of overcrowding. Subsistence living is possible for anyone who chooses it as a partial or complete lifestyle. We no longer live next to active volcanoes or build on fault lines because it is not necessary to do so.

One of the most stunning features of this future is, in fact, the incredible number of options open to those who live in it. Land is plentiful if you wish to grow your own food for your own use or for profit. The cities are much, much smaller, easier to manage, and pleasant places in which to live. The largest cities have approximately 250,000 people. There is no urban sprawl as the carrying capacity of the local area determines the limitations of any particular city in planning. The problems of managing a city which reached crisis proportions in the 20th century are not evident now.

The economy is relatively stable, as we have had to learn to live without continuous growth and have adapted to that norm. Cooperation has replaced personal gain as the principle upon which the economy is based. Avarice is no longer rewarded as an institutionalized part of the economic system, due to education which promotes the welfare of society and nature above individual gain. Therefore greed is not encouraged, but has returned to its former position as an undesirable human characteristic. Greedy individuals are viewed as parasites on society rather than idols. The free market system is still in operation, but on a much more manageable scale which eliminates many of the excesses of the past. The great quest for material wealth is tempered by the knowledge that amassing wealth comes at the cost of increased environmental damage. There are no billionaires in this utopia---we cannot afford them. All work is considered to be valuable because the society depends on cooperative effort. Such occupations as farmers and garbage collectors are recognized for their central importance to life as we now know it.

We have also learned from the lessons of the past regarding nature and our place in it. Conservation of the land and other resources is a way of life because of lessons learned from the ecological near-disasters of the late 20th century. Agricultural efforts use practices which return nutrients to the soil. Pesticides have been essentially eliminated as their cumulative effects were found to be more detrimental than beneficial. Organic farming practices have been instituted in our agricultural pursuits, using crop rotation, conservation tillage, microirrigation, hydroponics and many other ecologically sound techniques to maintain an agriculture which exists in harmony with the rest of nature. Reforestation has been a priority for many years due to the necessity to halt the soil erosion that was destroying fertile land throughout the world and the need to reverse the greenhouse effect. Other methods of halting soil erosion have also been developed and implemented as a matter of course. Protection of water systems, from upland watersheds to estuaries is mandated by wisdom, as well as legislation.

Recycling is mandated by law, and composting of organic materials is a way of life. One source of resources--metals, building materials, wood products--are the "ghost towns" which were mentioned earlier. The labor of our ancestors is paying off. Instead of having to manufacture from raw resources, we have a respite for a while as we recycle the excess of past manufacture. Salvage is an important occupation and is recognized as such. Clear-cutting and strip mining are outlawed because of the damage wrought to the entire ecosystem. Former landfills are "mined" for the products that were previously discarded. We have come to realize that it is economically more feasible to recycle materials than to convert raw resources into products. There are also different rules regarding other industry. Products are considered carefully before they are manufactured to ensure that their eventual disposal will not become an environmental problem. Everything manufactured is subject to a source waste reduction review, to determine how it can be made most efficiently and with the fewest disposal difficulties. Products which are easily biodegradable are highly favored. Everyone is aware of the importance of energy conservation to the health of the society and the ecosystem. All building construction has stringent energy conservation requirements. Cogeneration of power and heat-retaining systems which continually recycle heat are the norm. All

projects are measured by the ratio of their benefits to energy requirements. The fact that there are ample renewable resources and fewer people do not make this energy planning absolutely necessary, but people are aware that we cannot take resources for granted, as in the past.

Access for human powered vehicles such as bicycles is available, and most people are able to walk or cycle to work, due to decentralization of business. The highest priority of public planning policy is make the least possible impact on the natural surroundings. Land use is based on the best possible use, rather than the most expedient use, and so areas such as rain forest are not considered for logging or farming. This is no hardship to anyone, because the reforestation that has taken hold provides the necessary wood products for society, and there is ample land with rich soil for agriculture. There is no need to use the best available land for used car lots or office space. Development has ceased to be the measure of progress. The decay and removal of the effects of prior development has been accepted for years now as part of a smaller but better world.

Technological progress is not driven by the need to find solutions to problems engendered by population growth. New technologies undergo rigorous examination to assure that they will not be damaging to the ecosystem before they are introduced on a wide scale. Though this sort of examination requires a period of many years, there is no great rush to development as the need for the technology is less critical. The large-scale technologies of the past are still in place where they are applicable, such as telecommunications, air travel and computer data management but they are scaled down a great deal for the much smaller population, and the great amounts of energy which they once consumed are also smaller in scale.

The pace of life is quite a bit slower, reducing tension. The need to make a living is recognized both as a right and a privilege granted by natural law. Homelessness and unemployment are rare as all people have access to the resources provided by nature, and there is no scarcity of resources. Workers are needed to carry out tasks which are necessary to the economic system, but decentralization has eliminated many of the jobs which were far removed from production. Most people work part time in some production capacity, and the rest of their time is divided between social welfare projects and monitoring of ecological support systems.

The onerous burden of the one-child family has eased as the population has decreased. Two and even three children are the norm, although demographers carefully track population dynamics, and rapid increases are discouraged. The population situation is taken seriously by an informed populace, which knows well that quality lifestyles are dependent upon living in ecological balance. Everyone knows from years of instruction that a sound economy is based on sound ecological principles, and that rapid population growth will only absorb the economic gains that allow a reasonable lifestyle for everyone. The population report is as much a part of life as the weather report.

People are a precious resource in fact, rather than in rhetoric. Humans are aware of their fragile nature in relation to the world around them, and the need to cooperate is obvious now that the population has decreased. Any large-scale projects require cooperation of a larger part of the population of the world. Space exploration is being carried out on a scale which requires the cooperation of the entire global community, and all of the global community shares in the benefits and the pride of the enterprise. We are all responsible citizens of Earth, taking no more than is necessary for our support and returning all that we can to sustain the ecosystem.

Due to the limitations on the number of children, a child who is abandoned rapidly finds a home with people who are interested in adding to their family, or people who want children but cannot have them. Children are highly valued, because having a child is considered a privilege rather than

an inalienable right. Child abuse is rare as the conditions which encourage it have been altered and society will not tolerate it. The family is held in the highest regard as the first educator of the child. The formal education system is thorough in explaining the ecological balance that is present in nature and our place in it. Reverence for the life cycle that is sustained by photosynthesis is a cornerstone of the intellectual and spiritual basis of society. Reverence for all life is the common denominator in society. Everyone is well versed in the concept of interdependence between and among species.

With fewer encroachments because of less population pressure, people are able to live as they wish, as long as they are not in violation of ecological standards. Some people choose to live far from settled areas, and this is possible because most of the land is not carved into neat plots as it used to be. Individual freedom in matters of religion, education and political persuasion is aided by the availability of the physical separation of factions. The friction between ideologies has lessened as the per capita resource base has increased. Equal opportunity is based on equality of access to resources, and as resources are more plentiful due to decreased demand, opportunity is increased for all.

The study of history shows the manner in which the world of the past had encouraged expansion and did not understand limits to growth as a central principle of sound economic theory. Ecological systems theory and practice is recognized as relevant to all studies, and it is integrated into all other disciplines. Everyone is aware of the interactions of environmental systems and the necessary limits of human impact upon them. Everyone is aware that resources are held in common by humans and all other species, and that humans do not "own" resources any more than locusts or salamanders or platypuses do. The fact that any overuse or damage to a resource affects all species, not just humans, is a basic principle of life education. Students are rather condescending about the ignorance of their primitive ancestors. Like all students, they are amazed that their forbears could not make these connections which seem to them so tacitly obvious. However, everyone reveres the sacrifice that their ancestors made.

Due to this change in the thrust of education, humans no longer consider themselves at the top of the evolutionary ladder, but one of many species, each of which has its place in the overall scheme of things. We are willing to cooperate with nature rather than dominate it because our view of life has changed. We realize that we have our niche, and it is not our place to reign over nature. We maintain our activities with an eye toward coexistence with other species because we know we cannot exist without them. It was a hard-won awakening, one which nearly resulted in our extinction and the extinction of a great deal of life on the planet, but it has made our lives richer by far. We are no longer shackled by the illusion that amassing material wealth via frenzied resource exploitation will make us happy. The spiritual bond between humans and their natural surroundings has never been stronger.

Children are not the only ones who are highly valued in our utopia. Because there are fewer people, each individual is of greater value. There are jobs for people who want work, and they are compensated fairly. Speculation does not command the respect it once did, and a more lasting value system has replaced the manipulation of life forms. Human rights are more a reality than a dream, though it is obvious to all that human rights are subservient to the necessity of maintaining the planetary ecosystem. The pursuit of happiness is tempered by the right of the group to live in a viable environment. That is the basis of much of the legal system which exists.

This scenario is a fantasy, of course. Many of the things mentioned are what we would like them to be rather than what they probably would be. But the logic of this future is not a fantasy. A small

human population could thrive on hydropower generation, the burning of wood for fuel, and the farming of the best soils. There would be no urgent necessity for deforestation, farming of marginal lands or implementing technologies which might prove to be harmful. Due to the abundance of land, critically important natural habitats would not have to be disturbed. Competition for land between humans and other species would lessen. Competition for land between humans and other humans might, and probably would, lessen. The homeless people that once stood as an indictment of our human cultures would be no more. All people would be necessary to the economy because the economy would no longer be driven by greed, as the balance of consumers and workers would be more reasonable. Land left to the elements would return to its natural best use. Land disturbed by encroachment could be reclaimed by reforestation or the natural encroachment of wilderness. Most of the threats to our environment would be only reminders of where our arrogance had led us in the far distant past. Humility, instead of arrogance, would govern our actions. We would be participants in the incredible experiment of a small, technologically sophisticated population living in a vast arena of beauty, abundance and diversity---a return to the Garden of Eden. It is possible, without a doubt, that this could happen. It is not inevitable.