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THE MIDAS SYNDROME: HUMAN DILEMMA

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ABSTRACT

The biosphere is in jeopardy because of mankind's failure to recognize that natural balance is only achievable through variety. In channeling the diverse energies of the world to one species, the human animal, we are overpopulating the biosphere beyond its power to survive. Unchecked use of any form of energy is detrimental to world survival. Since the deteriorating power of the biosphere to respond is causing accelerated governmental instability the need for action is immediate.

A series of first steps to deal with the problem is outlined and the conclusion is drawn that these steps are possible and that delay will increase the difficulty of the task and decrease the reward for achievement.

1. INTRODUCTION

I want to thank the University of Miami for the opportunity of speaking here. There is a grandeur in the concept of a symposium based on that remarkable thin film which, alone in all the firmament explored by science, is capable of life support.

Drawing inspiration from this idea, I shall briefly examine the biosphere as I know it, its jeopardy, and the cause of that jeopardy. None of us here can fail to be aware of the gravity of our situation today, and all our separate problems are united by a basic cause which governments persistently underfund, under-regard, and very seldom undertake.

The title for my talk derives from the Greeks who gave us the basis of all art and science in western civilization, and gave us, too, the inestimable gift of a discoverer's clear eye. Do you remember the tale of King Midas, the progenitor of all great financiers, who received from the gods the gift of the touch of gold? Like any good economist of today King Midas proceeded to turn into gold all of his resources on which he could lay hands. The fearful nature of his gift was revealed when he tried to eat... and choked on precious metal... and when the warm and loving darling of his heart, his daughter, embraced her terrified father, putting her hands upon him... I do not believe there is another such clear

warning of man's relationship to the world and the danger of short-sighted greed; and I wonder at how surely the story addresses the great hazard of our time: overpopulation.

There is no doubt in my mind or yours that we are the most gifted of all species, the optimum form of life. But the gods have given us King Midas' choice. Like him we can turn everything into the most precious substance; like him we can turn all of life into power, into us. At this time it is the course we have chosen, though its price is irreparable harm to the biosphere and in human suffering escalates each year. But we are not compelled to continue. This, then, is an overview of our gift, of what it has done, of what the clear eye of reason can do to restore our biosphere and our place within it.

2. THE PROBLEM DEFINED

It is the nature of all life from the simplest amoeba to outgrow its environment--it does not need to be taught to do this, and it is a pity that so much thought has been wasted on justifying it. It took the world about four billion years to produce Homo sapiens, and it took two to five million years thereafter to achieve the first billion people by 1800-1850. It took about one hundred years for the next billion to arrive by 1930. The third billion in 1960, took only 30 years. The fourth billion in 1975 took only 15 years.

We are now manifestly past the ability of the biosphere to support itself and us, yet we are on a headlong course for the fifth billion, expected to arrive in 1987, a total of 12 years. By the year 2000 this thin film of biosphere is expected to support over 6 billion people. Why continue a recital of escalating numbers?... 146/min, 790/hr, 211 thousand a day...14 billion by the year 2130. At that time it is expected that human growth will stabilize. Let me quote from an article on population in a 1939 British Encyclopedia Yearbook. "The population of the U.S. will grow more slowly in the future until a probable maximum of about 153 million is reached by 1980." That was the best thinking of the day. Yet, when 1980 was actually reached, the U.S. population stood at 230 million, almost 80 million more than predicted, and no end foreseen, no action taken. Only other larger and more distant figures substituted for that magic moment when equilibrium will be achieved. Equilibrium with what? What will be left?

Figures for this country are even more exaggerated in other nations, where services cannot match procreating, and the existence of an uneducated, starving and embittered population makes havoc of any legislative program to reduce numbers or any government which proposes it.

3. IMPRACTICAL SOLUTIONS

The answer has historically been migration, but the habitable areas of the world are now largely filled, so that "boat people" are turned away without mercy. In the Cambodian-Thailand agony, it has been estimated that as many as 5 million emigrants died or were killed.

This country has chosen to largely ignore immigration, because of a tradition based on facts no longer applicable, yet this policy

serves only to postpose the necessity of action in the mother countries with their soaring birthrates, and to make ever more difficult a balance in the host nation. In this country, the influx of illegal immigrants has soared well over 1 million/year, and, added to legal immigration, is estimated to equal the national birthrate. Delay in control makes every control more tenuous, as the lines of common language, education, ancestral loyalty, all become unusable, leaving the government with few choices other than acquiescence or force.

4. PENALTIES FOR INACTION

If control becomes more difficult, the penalties become more severe. Let us review the broad outlines:

4.1 In Energy

Population growth is inextricably bound with the consumption of the world's energy. All life is energy, it exists by consumption of other energies--plant, animal or atom. The history of man's growth has been the gradual intensification of energy effectiveness, and the use of this energy in ever-increasing discharges has promoted the takeover of the world by one species. It has promoted other problems.

The emission of CO_2 from fossil fuel power is affecting global climate, and, if not controlled, it will make all life as untenable as that on Venus.

The acidity of Canadian and Northeastern lake systems from SO_2 emissions has decimated fish, forests, animals, even the bees on which so much of the future depends. Studies by Dr. John Winchested of Florida State University show a strong correlation between rising lung cancer and production of SO_2. At Shippingport, PA, scrubbers have been installed to remove the offensive emissions. Yet a 1300 acre valley is now filled with the threatening presence of 200 million tons of sludge.

Nuclear power has been quoted as the answer to the energy demands. Its use is growing rapidly in the world despite the bitter opposition of a large segment of the population. Apart from its inseparable connection with nuclear war, there are the innumerable questions of safety, involving possible accidents of incredible magnitude through oversight, carelessness, mechanical defect, and the unknown... and there are the endless and unanswered questions involving nuclear wastes, failure to solve the storage problems, the dumping of wastes at sea, and the poisoning of the future.

Whatever choice we make, the increased use of energy by an expanding population is bought dearly. Where there is no visible damage as might be with renewable energy, even then there is a gift-wrapped penalty. Higher use of energy postpones the inevitable population adjustment and further robs the future while no attempt is made to restore a natural proportion.

4.2 In Species

Once we have wiped the slate clean of a piece of the design it is a finality. Time will never replace it. The increase of humanity

is directly responsible for eradication or diminution of an ever-growing number of species. Perhaps ninety percent of all created species have become extinct. In the past they were replaced with others; today only one species replaces the void. Out of all the vanished life forms in the last two hundred years, more than half have disappeared since 1900 and today it is estimated that one to three leave this biosphere each day. By the end of this decade it is projected it will be one an hour.

When numbers of people move into a space which a variety of life inhabited, there is an obvious corollary in the disappearance of that varied life. Less immediately apparent are a host of other conflicts. Water from which it came is basic to all life; but man, with imagination and greed has utilised it in many ways so that this basic life necessity is increasingly denied to other species.

In developed countries usurpation of habitat may consist of destruction of the natural plant forage and substitution of less nutritous or protective plants, or all may be destroyed for mining construction; in poorer countries eradication of the herbiage occurs and deserts are created in a desperate struggle for life which demeans the living. Other life is detroyed in sudden death by our transport vehicles. Highways, covering ever larger sections of the land, isolate pockets of wildlife as effectively as a zoo but without sufficient sustenance.

With man go his pets and livestock, fitting into their niches as hunters or grazers. Better fed and nurtured than the wildlife, brought into unnatural concentration, they are inordinately successful competitors. Further inroads are made by parasites and viruses familiar to domestic livestock, virulent to the wild.

Pollution, war and trapping decimate other species. Clear cutting is proceeding in areas where plants, insects, even birds may be unknown to us. The loss of one plant can take with it over two dozen birds, animals and insects.

4.3 In Land

Pressures brought by the swelling numbers of humans cause all other species to retreat and retreat until there is no place, for the earth and all that grows on it are under assault. The tropical forest is disappearing at from 25 to 100 acres per minute. In starving Africa about one fourth million acres of desert are created each year. In the Amazon where cutting is proceeding with devastating speed, forest land which loses less than 3 pounds of soil a year is clear cut; and this same land can lose 34 tons a year.

At home, in the United States, there is an annual loss of one million acres of farmland; three million acres of crop, pasture, range and forestland. Our own forest in the eastern United States is in crisis. Over the entire area the forest is in decline, surveys by the forest service show a rapid sickening of at least a half dozen coniferous trees. Some of the hardwood trees in high locations are showing the same symptoms. Plant pathologist Robert Bruck has said we may be facing the "ecological catastrophe of the century". Acid precipitation has caused similar declines in Europe.

4.4 In Water

The hydrosphere that developed all life is often so sullied that it is unable to sustain life. Irrigation accounts for 81% of all water used in this country and an estimated 53% is tapped from ground water storage. In my county springs which ten years ago leaped a foot into the air have almost ceased to flow. We mine our drinking water while we drain the land which contributed most largely to underground supplies and on which our Florida rainfall depends.

Nationwide more than 60,000 pollutors dump waste waters into municipal sewage plants. Dumps of toxic wastes may be gradually filtered to the water table or taken up by vegetation.

The serious nature of our water poisons was graphically illustrated by last years' great die-off of loons and pelicans. Studies by local Florida laboratories and by the Department of Interior showed that both native pelicans and migrating loons from far north had succumbed to high levels of heavy metals.

Over the world the same belief in water's ability to purify exists as tankers pump bilges, factories pour wastes, pesticides are sprayed on ponds, and fishermen fight over dwindling fish supplies in the ocean.

4.5 In Political Structure

The future dims as populations surge and economies falter; political upheaval looms. The Third World, which is most in need of help, is most poorly equipped to improve conditions. Many developed countries whose birth rates, or even birth numbers are falling are less obviously oppressed by the same factors; human tides have washed over them for many centuries, leaving few resources to nourish a future. The coming of democracy all too often gives license without wisdom or restraint, so that unloosed resources are squandered without replacement. From the pressures of overpopulation comes the great flood of immigrants who have no future unless they find a new nation, who bring cheap labor, future political unrest and, always, a tradition of large families. And in reaction to the divisive voices governments tend towards totalitarianism. Unless a way is found to curb the growth of population there is no future for man or any other life form. Unrest will surely find a way to tap the enormous destructive powers which yearly grow in strength, numbers, and accessibility.

5. ARGUMENT FOR ACTION

Faced with multiplying probabilities, which in the long term assume the proportions of certainties, it is scarcely credible that man has not put his greatest concentration on the best and speediest solutions to the basic problem. Simultaneously, the finest international resources should be devoted to solving those problems connected with a diminishing or stabilized population.

Though the facts are gloomy the import is optimistic. The path out of our dilemma is clear. King Midas, unlike most Greek Heroes, had his fatal gift removed and his daughter restored. Through no miracle can we ever hope to see again those breathing, feeling life

forms which we replaced with the gold of humanity, yet, like Midas, we have the power to refuse to exercise our extraordinary gift and to live in sensitivity to the world about us.

5.1 Specifics

These are some of the steps we should take:

We should devote a significant part of national budgets to making birth control available to all in every country. Instead of desisting when confronted with religious dogma, means should be found to reconcile, or finally, to confront emotion with reality. Positive incentives should be offered.

All present or possible birth control methods should be studied as to effectiveness and the full force of science be employed to develop the best means.

Education should teach demography and an understanding of the biosphere as a basic science for all, and a budget should be allotted to educate citizenry and legislature alike. There is no course now taught so important to the well-being of society.

Each country should set ideal population figures capable of existing in perpetuity and should set goals to achieve these figures within a reasonable period of time. Unbridled immigration, which serves to camouflage the problem and makes solutions more difficult, should be restrained to comply with conservation of resources and political equilibrium.

International conferences on population problems and their control should be attended by heads of state as well as specialists to give due priority. Resource depletion should include questions of international trade controls and land use laws which currently encourage waste.

Concurrently with birth control efforts, govenments should undertake studies to determine how to redirect job training, the economic sciences, tax exemptions. Each of these areas is based on a concept of infinite growth as desirable and achievable.

6. CONCLUSION

The above lightly sketched moves touch on some of the most important areas which need addressing. If they seem like a tall order we should consider... through delay we have already destroyed much in the biosphere, have intensified its jeopardy, have depleted the joy of all life to come... Nothing suggested here is impossible to reasonable man. All of it is necessary to preserve and enhance our particular interests and our particular lives. Each year of delay the reward is less, the achievement more difficult.