

Human Ecology and the Millennium: Overwhelming (or Overcoming) Disaster Ahead?

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"... the terrible thing was that they were not imaginary but really existed - that bloated, torpid, somnolent, exalted ruling stratum. They contrived to float comfortably somewhere above the war, oblivious of their fearsome responsibility" (Solzhenitsyn, 1999, 120)

INTRODUCTION

The balance between the human population and the environment available on Planet Earth has tipped from healthy to diseased, from positive through neutral to decidedly negative, and from sustainable to collapsing. Population growth has exceeded the capabilities of our environment, and the will of the proverbial powers-that-be to halt the growth of both population and environmental problems signal that the future for many humans may be limited. This fundamental problem took place through and with a slow and gradual accumulation of unsolved problems. At one time, these problems could have been addressed, dealt with, and solved, individually and/or sequentially and/or comprehensively, through appropriate allotment of resources, energy, and talent.

Decision-makers and the elite of societies around the world, however, neglected, denied, or ignored these accumulated issues, instead focusing their attention on their own self-gratification, the enhancement of their personal wealth, power and control, and on the perpetuation of unsustainable growth at the long term expense of the planet. They appear to have lacked an ecological view in which relationships and long-term consequences could be understood. As a result, we are faced with a virtual cascade of merging older and brand new emerging problems that are rapidly expanding and coalescing in their scope, depth, and urgency.

The failure of the key decision-makers to act on behalf of the long-term future of the entire population and the environment is particularly important. Unless the reasons for their negative actions or failure to act are clearly understood, we are bound to continue and repeat the past mistakes, until the termination of human life on Planet Earth occurs. Even if we understand, we may well not be able to act to reverse the situation we currently have facing us at the Millennium. The fundamental failure appears tied to

greed, that is, to an economic system that encourages monopoly capitalism and individually oriented, short-term, financial gain rather than long term, public well-being of the masses. The decision makers, the elite, have not only exploited the Earth and the human population for their own wealth, greed, pleasure, and power, these so-called leaders have built their own personal and private, "empires," at the long-term expense of the Planet and its human population (Williams and Beare, 1999). We have witnessed powerful decision-makers acting on their own behalf, or on the behalf of a few others like themselves, and disregarding or even acting against the sustainable, collective well-being of the population of human beings and their environment. Rogers (2000) for example, otherwise optimistic that alternative sources of energy will emerge, states that, "capitalism can and should be a liberating and uplifting force for the world society. Only in a few nations is capitalism being practiced in ways that bear some remote resemblance to social equity and human benevolence" (p. 266).

Decisions favouring the wealthy and the powerful few who become the elite, seem to be common and easily made. Most of us, most of the time, accommodate to the powerful and the wealthy. Only rarely do we "speak truth to power," as Martin Luther King stated so eloquently in his speeches. Even less often do we revolt. Sadly the avarice of some human beings has encouraged a pattern now threatening the lives of the majority of humans if not all life on the planet. Public awareness of the decision-making mechanisms, and of the consequences of the decisions already made is remarkably limited. Though the words democracy and democratic are still bandied about, the denial of participation by the majority of those living within each society, has made a mockery of governments, corporate businesses, and the elite generally. The other end of this mockery is the tragedy of the majority and of the "commons". This once rich commons has been and is being quickly stripped of its few remaining assets.

Asset stripping has occurred through creation of junk products suitable for endless bouts of conspicuous consumption, environmental destruction for short-term financial gain, and the worldwide military system that encourages and drives technology and economies for warfare, with military power and might that squanders the resources of the world. The

resulting gap between the wealthy and powerful and the poor and powerless frightens the many who are aware, and further dulls the intellect of those incapable of understanding or who choose to ignore or deny what is taking place. The military and various police and security forces are of course, allied to the wealthy and the powerful, in fact, they serve as the dividing line between rulers and the ruled. Soares (2000) states "as the new millennium begins, the outlook seems unpromising. The destruction of the planet which gives us life and the widening gap between the 'haves' from the 'have-nots' make our present and future seem rather bleak" (p. 211). Attali (1991, 79) states "the real loser of the next millennium will be the planet itself if the imperative of the market is allowed to run rampant without restraint. Natural resources, which took billions of years to create, will be depleted as the earth is overrun by nomads loaded down with objects fabricated out of irreplaceable raw materials."

EMERGENT ISSUES

As a direct result of poor quality decision making about global issues, such as population control, development and use of nuclear weapons and power, allocation of resources, global warming, pollution prevention, environmental destruction, and many others, it is highly likely that a population collapse will occur in the foreseeable future. One of the major issues concerns the destruction of the environment. Global warming is on the way (Fetter, 2000). The CO₂ level and ratio has risen, and predictions are that surface air temperature, as a result of these changes, will increase 1.5 to 4.5 degrees Celsius. The lower figure of 1.5 degrees is "greater than any change in the last 10,000 years" (Fetter, 2000, 38). Rogers (2000) states that "conventional energy resources, such as petroleum and coal, while currently adequate in supply and presently low in cost, are finite and will grow more costly as reserves are diminished and as the adverse environmental effects of fossil-fuel burning become more severe." (p. 267). He adds that, "environmental conditions are deteriorating in many regions of the world" (p. 268). Action must be taken as soon as possible. McVeigh and Mordue (1999) add that in the next 50 years, the large increase in world population, energy use, and CO₂ increases indicate that, "the world-scale effects could be so major that limitations of CO₂ emissions must become and remain a necessity" (p. 3). Yet, firm action to limit carbon dioxide production is so far non-existent.

Another and related aspect of the environment concerns the loss of bio-diversity. "Biodiversity is defined as all hereditarily based variations at all

levels of organization, from the genes within a single local population or species, to the species composing all or part of a local community, and finally to the communities themselves that comprise the living parts of the multifarious ecosystems of the world" (Wilson, 1997, p. 1). Scientists examining the loss of bio-diversity are noting a collapse for plant and animal populations and species already. "Most estimates of present rates of extinction would suggest that many hundreds of thousands, if not millions, of species are threatened with extinction and that we are witnessing a mass extinction spasm as great or perhaps even greater than any in the geological record" (Stork, 1997, p. 45). Hughes et al. (1997) estimated 1800 populations are being lost globally, in tropical forests alone, per hour. Some 16 million genetically distinct populations (not species) are being lost each year. In terms of species, estimates on 8 April 1998 were that 104 species were becoming extinct per day, and that as many as one third of all species would be gone in 8 years (tripod.com/proclam.html). Some 1.4 million species have become known to biologists of a rough estimate of 12 million species, although this is only a guess (Reaka-Kudla et al., 1997). Meanwhile most of us not fully versed in natural or biological sciences are entirely unaware of the scale of loss and its implications. Those knowledgeable about social sciences however, will recognize parallels with the loss of indigenous cultures, unique languages, and diverse ways to live.

Still another major issue concerns population, specifically the rapid increase in the human population. The raft of reports on population growth beginning with the Club of Rome reports (Meadows, 1974; Mesarovich and Pestel, 1974) and extending to the present, can now be taken in two different ways. The conventional and kind view is that the reports were destined to warn the world of the problems associated with unchecked population growth. The less conventional view is that the time is now ripe to design and develop strategic and tactical interventions to reduce the human population. However disguised, this reduction may be inexorable and inevitable. Pimental's findings (1994) that 1 to 2 billion humans is the maximum number who can be ecologically sustained on Planet Earth is chilling: what is to happen, then to the "excess," the other 4 or 5 billion already alive? What is to happen, then, to the additional 5 to 10 billion human beings about to be born, around the world over the next few years? The Holocaust amounted to 6 million deaths, more or less (<http://mtsu.edu/~baustin/jewvicts.html>). World War II amounted to 55 million deaths, more or less (<http://euront.nl/users/wilfried/ww2/foreward.htm>). This contempo-rary

problem is hundreds of times greater in terms of sheer numbers, than that posed by the Holocaust and World War II in numbers! If 1 to 2 billion people is the maximum sustainable level of the population, given the resources of our Planet Earth, that means that 4 to 5 billion must be extinguished as soon as convenient, for the remainder to live with any degree of comfort. That population size means that even a replacement only policy, the equivalent of China's one child per family limit, installed as soon as possible, cannot begin to suffice (<http://www.enviroweb.org/gaia-pc/pimentel2.html>).

Those most likely to be survivors are of course, the elite, the billionaires, the government leaders, the key corporate leaders, the nuclear and other technicians necessary to maintain the lights, power, sewers and so on, and of most importance of all, a strong military and security force. Perhaps this latter force will be smaller in size, composed of only the existing officer and non-commissioned officer classes in selected countries, perhaps not. Globalization, Susan George (2000) reminds us, "now seems well on the way to destroying the classic welfare state and is leading us towards a politics of the third kind - not at all the same thing as the third way. The primary question it asks is neither 'Who occupies what rank on the social ladder?' nor 'Who gets the juiciest slices of the pie?' but 'Who has a right to survive and who does not?'" (p. 14-15). She argues that, "globalization can't include everyone and is, in fact, leaving more and more people out." The military and security forces will have a cutting edge role in what lies ahead.

When might this population die-off take place? The sooner the better, some would claim! The longer this process of reducing the human population to a sustainable level takes, the more people will be born and alive and the more the damage to the existing environment and its resources. There is no need for more human beings, the problem is that too many already exist. By 2050, unless something is done, the estimated population will be 10 to 15 billion. The problem simply gets worse and worse, and unavoidably, the existing environment is reduced in quality, if not destroyed or consumed. The reduction of population traditionally has occurred through war, famine, disease, natural disaster, and so on. These features, by intent of leaders or decision-makers, may be heightened, and spread from geographic locale to locale, or social sector to sector. Presumably the elite can and may use whatever resources and ideas are available to terminate people in any category they select. The rich and the powerful have generally benefited greatly by war. They are almost never affected adversely by famine or disease. They are

rarely hit by natural disaster. Therefore, their approach will be to protect themselves while surreptitiously promoting war, famine, disease and neglecting to respond adequately to natural disaster. Presumably, for we the people cannot really know what is being planned for us.

The question becomes, are we destined to follow the extinction of other species? Further, are some of us now planning and perhaps even carrying out this extinction? And perhaps worst of all, if these leaders are not planning to create a sustainable population for the resources available by causing a reduction in the human population, why not?

Are they (our leaders) capable of extinguishing those humans whom they regard as "surplus to requirements?" One only has to look at some of the evident population reduction activities in place and operating to realize that the leaders are fully capable and are or seem to be, already active. But, we might argue, things are getting better and there is no need for such a terrible fate.

Are things really better than ever and this line of reasoning simply an insane fear? Easterlin (2000) noted "most people today are better fed, clothed, and housed than their predecessors two centuries ago. They are healthier, live longer, and can read and write . . . Although the picture is not one of universal progress, it is the greatest advance in the condition of the world's population ever achieved in such a brief span of time" (p. 32). He goes on to argue that in the past 50 years "real GDP per capita has multiplied from two- to five-fold and life expectancy has soared into the 60 to 69-year range. Literacy has risen sharply . . . Fertility rates have already declined by 40 per cent . . . The story is clearly one of the increasing globalization of human development" (p. 44). Robinson (1998) claims that "population growth rates . . . are declining nearly everywhere" (p. 7). He argues that given procreative options now available, "The human species is on the verge of gaining a humane, voluntary control of its own demographic destiny for the first time in its history" (p. 9). For a time, social visionaries predicted a transformation of the workings of societies, they spoke with optimism that the future would be positive. "Contrary to general belief, answers exist for nearly all of our most compelling problems" (Ferguson, 1980, 1987, p. 429). The protective values of the past were contrasted with the coming growth values that would transform our personal lives, our relationships, and our societies (Ferguson, 1981).

Others (Catton, 1982) however, argue that the sustainable level of population was surpassed many decades ago, and that only a die-off can return the

planet to reasonable numbers. A strong possibility already exists that some people and organizations are actually engaged in depopulation efforts. This key issue may serve as an illustration of the dimensions and scope of the issues before us at the turn of the Millennium. And, rather than immediately claim that depopulation is a taboo issue, this concern may signal whether or not our global leadership has the vision, the will, and the capability of dealing with the very real issues we are facing. Indeed, if depopulation is not being addressed, then some might claim the vision and will-power of the leadership may be in serious question.

These and related issues, when faced squarely, lead us inexorably towards the frightening situation we now confront. The ethical complications are enormous, far beyond human comprehension, and perhaps forever impossible to answer. One can only shudder at the possibilities. However, a few examples of the mechanisms that may already be in use to reduce human populations include: 1) the spread of HIV-AIDs, 2) economic sanctions employed by the United States as in Iraq and Cuba (Garfield, 1999), 3) modern warfare as in Columbia, Central America, Kosovo, Iraq, Vietnam, Cambodia, and so on, 4) the continued production and sales of destructive products such as tobacco and alcohol, 5) unsafe and environmentally destructive systems such as petrol based transport systems (<http://www.nexusmagazine.com/ulp2.html>; <http://care.easynet.fr/~michaelo/led.htm>), and 6) limiting access to health care as a policy (<http://www.cato.org/pubs/pas/pa-246.html>; Iglehart, 1999). Further the leadership may be exploring other means of extinguishing "surplus" human life, whether with viruses, techniques drawn from molecular biology, "drug wars", advances in nano-technology, or fomenting terrorism to create social instability so that a military or elite dictatorship can rule even more firmly than they do now. These broad mechanisms are being or may be used around the world while mass media entertains and commercialises junk products to distract the people from even noting their existing plight. Sports including Olympic Games, television, pleasurable pastimes and activities, tourism, and other distractions may keep people busy and occupied, so that they will and do not face an unpleasant reality.

Whether or not HIV-AIDs was deliberately created and spread remains an open question (<http://128.218.224.151/social/spotlight/2098.3cce.html>; <http://www.all-natural.com/aids-1.html>; <http://www.churchofethanesisia.org/aids.html>). The policy and programs instituted during President Ronald Reagan's regime to combat this virus were minuscule, both too little and too late (Shilts, 1987). When, not

if, deemed appropriate, these and other instruments could be used as weapons to reduce the population, or selected parts thereof. The advent of molecular biology and biological breakthroughs that may generate speciation, may also be used to promote infertility or mass die-offs of those humans deemed not acceptable for reproduction.

Recently a third United Nations Commissioner for Iraq resigned claiming that the sanctions imposed by the United States were killing children at a horrendous rate (<http://www.nonviolence.org/vitw/>; <http://leb.net/IAC/main.html>). But even without such war situations, some 12 million children die each year from preventable causes, while 160 million are moderately or severely malnourished (Rasheed, 2000, p. 10). The School of the Americas, also known as the School of the Assassins, in Fort Benning, Georgia, in the United States, has trained many in Latin America to conduct warfare (<http://www.soaw.org/>; <http://www.peace-action.org/soafs.html>). Some 1.7 billion dollars is currently being allotted to fight a new and expanding drug war in Columbia.

The drug war (Chepesiuk, 1999; Thompson, 1998; Baum, 1996) has served as an excuse for the United States to take over elected governments in Latin America and to imprison hundreds of thousands in the United States, especially those who might oppose the government and those from minority populations. Long prison sentences prevent people from reproducing too.

Military and security oriented inventions, such as traditional guns, bombs, and bullets have been surpassed with the advent of nuclear bombs and CBR warfare. However, even newer weapons have already emerged, such as, HAARP (Begich and Manning, 1995; Djuth, Elder and Williams, 1996; Technical Information Division of the Naval Research Laboratory, 1998; <http://w3.nrl.navy.mil/haarp.html>; Smith, 1998), Echelon (<http://www.hr/mprofaca/echelon01.html>; <http://www.aclu.org/echelonwatch/>; <http://www.heise.de/tp/english/inhalt/te6929.1.html>), and Carnivore. In fact and of course, Echelon, Carnivore, digitized driver's licenses, identification cards, satellite surveillance systems, and similar devices, are designed not just to protect humans from terrorists, but also to enhance the power of and control by, the elite. The steady tightening and regulation of identification, ownership and possession of commodities and resources has been proceeding apace. The computer technology that tightens systems of social control has advanced without serious cautions or restraints, so that virtually all electronic communication around the world, is screened for content, continuously.

Without being paranoid, we can be certain we are being monitored. The powers that be and their loyal followers have been busy recording each persons name, address, identifying characteristics, and vital statistics in massive data banks, as well as what is written into the Internet, what is charged on credit cards, and what is spoken into telephones. This record keeping can confirm the existence of people, and then to serve as a guide to tick when that specific person is accounted for, i.e., extinguished. Presumably, the reason for surveillance is that terrorists, dissidents, revolutionaries and secretive types may cause problems. In so far as possible, it is easier to carry out the necessary steps of worldwide monitoring with a fair level of confusion and misinformation, pseudo-problems and issues to distract, entertainment for the majority, tranquillisers and agents such as television and diverse "mind candies". The isolation of some groups to serve as pilot projects, whether selected geographically or by other categories, may well begin in the near future. (Ian Wishart, in a series of books such as *The God Factor*, *The Paradise Conspiracy*, *Lawyers, Guns, and Money* and so on, published by Howling at the Moon Publishing in Auckland, would argue that New Zealand has already served as such a pilot). Some would also say that the war in Central America has provided a guideline, a test or pilot project. (Didion, 1982, 1994; Dounie, 1998; <http://lcweb2.loc.gov/frd/cs/svtoc.html>)

The seriousness of our situation, the stress and strains to our personalities, lives, and relationships, leads some of us to opt out, via drugs and distractions. For many, dulling of capabilities and activities continues daily. The amounts spent on tobacco and alcohol and prescription drugs are enormous. Of course, some of this use of drugs is entirely voluntary, some is probably even healthy, but the money spent for advertising, for political support and for cultural/societal support of promotion of drugging is enormous. Private corporations make money, some of which accrues to businesspeople, some of which goes to lawyers, and much of which goes to governments. Governments depend on the tax take from the sale of these destructive products. Again and again the government and big business promotes the sale of these drugs and yet on the other hand, advocate ineffective measures and programs to prevent abuses. The paradox is ignored by most, even when blatant as with subsidies to grow tobacco.

We can succumb, the numbers in fact who have succumbed is already enormous. Impoverished, uneducated, in poor health, unemployed, underemployed, imprisoned, located in backwash locales and ghettos, subjected to meaningless

entertainment through television, infused with alcohol and tobacco and drugs, confused by misinformation, human beings have for all intents and purposes, abandoned themselves or been abandoned by society. Many have succumbed and there is no way they and healthy positive societies can be rejuvenated, given a lack of will on the part of leadership, a lack of resources, and unavailability of their own personal ability to pull themselves up by their proverbial bootstraps. The world and many of the people within, have written them(selves) off.

The rest, especially those who are aware and concerned, a small fraction of the masses, are being pushed inexorably into the same status as those who have (been) "succumbed". They struggle, resist, work, study, expend their hard won energy to persist and maintain their meager status, try to send their children to school in the hope that futures will be kinder, and so on. A few have the illusion that they too can rise to the top of the economic and power hierarchies. This small group continues to hope and to try. Many of them are aware of the dilemmas, intensely aware, and highly concerned. Some resist the possible scenarios of the future. Goldsmith (2000) states "If the public becomes sufficiently informed and continues to react as it has been doing this last year against the sordid agenda of its political and industrial leaders, it is just possible that we might be faced with a very much rosier future" (p. 43). Maybe psychologists, or members of other disciplines can find "new opportunities for developing and applying their knowledge" (Marsella, 1998, 1289). Perhaps given the spiral theories that we fluctuate from capitalism to socialism and then to capitalism and so on, we may just be in a temporary ebb (Boswell and Chase-Dunn, 2000)

On the other hand, the majority of us just might not be faced with a happy future for the Millennium. The balance between a few, who live like proverbial kings, and the many, who are malnourished, in poor health, minimally educated, and under-employed, is delicate. Those in between these two positions hold a key.

ARE ALTERNATIVES AVAILABLE?

The few of us, blessed with good education, ecological awareness, good fortune, jobs and professions and careers, networks of influential friends, personal resources, organisations and possessions, we have choices and relative freedom to decide - do we follow the paths to become as the elite and key decision makers? Do we support these

powerful leaders, the wealthy, the powerful? Or, can we call them to account and force them to improve their performance? Do we try to replace them with others who will listen, who have ecologically based awareness, who will act positively? Even if we gain better leaders, are we caught in a Catch 22 dilemma, where we are damned if we prevent population die-off, and where we are damned if we do not prevent population die-off?

How aware are we, really, of the power and the purposes of the elite? The gap is enormous. I submit that few of us have even a minimal level of knowledge, or interest or skill in gaining knowledge, even an awareness that there is an elite, even while this elite are preparing their future, without due regard for the majority of us. We are lulled into thinking they like us and want us around. Even among ourselves, we censor ourselves, accuse those who become aware of the gaps between rich and poor, powerful and powerless, as weird or worse, conspiracy theorists, and keep ourselves busy doing the routines and activities that the creators and managers of our culture have set up for us. In effect, we are like sheep in a paddock, cows in the meadow, or chickens in cages. Others of us are like the shepherds, farmers, and factory workers who process meat. Our days are guided by performing those activities that our educational inputs and social pressures and greed for money and the good life have trained us to accomplish. Our health is monitored, our moral behaviour is guided by a system of social control, and we seem destined for a fate not unlike that of mutton, beef or Kentucky fried, and those who prepare and serve such products.

When? This is, by nature, a global problem, and therefore a worldwide scenario. However, any global perspective reveals that centers of power, core civilisations, such as the USA, plus Russia, China, Germany, France, United Kingdom, and Japan are going to be relatively secure - for if any one of them attacks the other power centers, then these cores could be eliminated (Huntington, 1998). Leadership of each major country will undoubtedly work out a quid pro quo, even if their population will suffer. Similarly, the leadership of major corporations will manage, even during mergers, acquisitions and take-overs. Leaders watch out for other leaders, elites support elites. But for us, the majority of the population, do we really have any alternatives?

THE FUTURE

Decisions may be already have been, or are being, made, covert, and hidden from conscious awareness

of the majority of people. Plans may already be laid, the implementation of those plans may already be in motion. Corporations and military groups are slipping down their missions and focusing directly on survival and profitability. Politicians too, are more concerned about their own personal well-being than the well-being of their supposed constituents. They are unconcerned about the fate of the unemployed, the uneducated, those who have never held a decent job, the malnourished, the people with disabilities, the elderly, children, minority groups, the rest of us, except when pronouncements are needed to win votes. The livelihood of all the people is not their responsibility - they are responsible only to them-selves, however defined, and the rest of us are not part of their world-view. We are left to be responsible for ourselves. And, if one considers the future of life, and the environment, on Planet Earth, a large number of people may be responsible for themselves, but entirely surplus to requirements, an excess. Outcomes for these almost impossibly difficult questions will become evident early on during this Millennium.

KEY WORDS Ecology. Millennium. Decision-making. Disaster. Future.

ABSTRACT Given the interrelationships between people and environment, as well as the links between past decision-making and present day outcomes, the current state of the world is precarious at best. Many problems have accumulated, and new ones are emerging, while key decision-makers have ignored responsible and ecologically aware and appropriate actions. The result, as the new Millennium gets under way, is a frightening choice about issues such as an "excess" population, severe environmental damage, and inequitable resource allocation. Most people ignore or deny the dilemmas now evident, but the future will both demand and yield answers.

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