

Global Bioethics: Converting Sustainable Development to Global Survival

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Abstract

Millions of people in various parts of the world and within each country are presently surviving in categories described as "mere," "miserable," "idealistic," "irresponsible," and "acceptable." The term "acceptable survival" is proposed as a bioethical goal of global survival, looking beyond the 21st century to the year 3000 and beyond. The frequently used alternative term is "sustainable development," but in most contexts this is an economic concept and does not imply any moral or ethical constraints, except where these are spelled out. Acceptable survival, broadly defined, means acceptable to a universal sense of what is morally right and good and what will continue in the long term. The expanding dominant, but irresponsible, world culture is not an acceptable type of development because it cannot survive in the long term. [M&GS 1995:185-191]

While the word "survival" has appeared in the titles of many books, it has been used without qualifiers, as in *Tragedy of Survival*, *Comedy of Survival*, *Road to Survival*, and others [1]. We see in the title of a recent journal the use of the word "survival" coupled with a qualifier, the word "global": *Medicine and Global Survival*. Haunted by the realization that overpopulation and overconsumption are driving global destruction [2] and feeling an ethical obligation to combat these and other of the world's most pressing problems [3,4,5] the editors called for contributions that might promote "global survival." Although focusing on "medicine" the issue quickly becomes a matter of economics and the ethics of economic decisions involving the natural environment in the context of global survival. The title of this journal implies an ethical decision that calls for examining the kinds of global survival.

With the inevitable fall of Communism, the worldwide conventional wisdom has become convinced that free private markets and freedom to choose personal economic activity make capitalism the only path to "life, liberty and the pursuit of happiness" called for by the U.S. Declaration of Independence in 1776. In the same year Adam Smith, the father of modern economics, proposed that an individual who intends only his own gain is led by an "invisible hand" to promote an end -- the general welfare -- that was no part of his intention [6]. But in the 1990s -- and looking forward to the 21st century -- economics is no longer a matter of individual barter. In espousing the views of Adam Smith and the concept of "the invisible hand" the book *Free to Choose*, by Milton and Rose Friedman, ends up by being a diatribe against all forms of government action that affect the economy [6]. The Friedmans' bitter criticism is justifiable to some extent, accounting for the immense popularity of the book, because regulating agencies are so often unable to fulfill their missions justly and efficiently.

While Adam Smith may be the father of economics, he could not have seen or imagined "that the main creators and controllers of technology have increasingly become large multinational corporations with more global reach than global responsibility," as described in Paul Kennedy's impressive volume *Preparing for the 21st Century* [7]. In his remark Kennedy anticipates his only reference to ethics, in

which he departs from the main theme of economics. He continues "because we are all members of a world citizenry, we also need to equip ourselves with a system of ethics, a sense of fairness, and a sense of proportion...." Here he refers to only one person, the ecumenicist Hans Kung who wrote *Global Responsibility: In Search of a New World Ethic* [8].

It is clear from Kennedy's look into the 21st century that global survival is a matter of global ethics as much or more than it is a matter of global economics. The legacy of Adam Smith, the invisible hand, and the right to life, liberty, and the pursuit of happiness must be tempered by global ethics. In the present essay, it is insisted, freedom to choose must be tempered by global bioethics if there is to be global survival. In other words, global bioethics is global ethics monitored by biological knowledge. Global bioethics is more than what bioethics has become in the last 20 years. It is not merely medical bioethics on a global scale. Bioethics was proposed originally in 1970 as the "science of survival" that would utilize science and the humanities [9]. Bioethics was quickly popularized by medical ethicists and the word is now widely understood to be focused on the ethics of medical practice. Global bioethics [10,11] is a multidisciplinary focus calling for participation by sociologists, economists, biologists, and, indeed, all professions.

Global bioethics was proposed to extend the 1970 idea to global survival, with careful attention to what is meant by "survival" and what is ethical activity in pursuing health care and a related concept, "earth care," on a global basis.

Survival is easily defined. Survival for an individual is postponement of death. Survival for a species is postponement of extinction. Survival of a civilization is the postponement of an inevitable collapse or crash, with overwhelming decreases in total numbers of people. The question is whether a decent civilization could be rebuilt after a crash. The phrase "global survival" does not specify what kind of survival is called for. Previously it was possible to suggest five categories, or kinds, of survival as "mere," "miserable," "idealistic," "irresponsible," and "acceptable" [1]. These will now be discussed and it will be proposed that the term "global survival" be understood to mean "sustainable" and "acceptable" global survival. Mere or miserable survival is not enough and irresponsible survival cannot last.

Five Categories Of Survival

1. Mere Survival

Mere survival is a term used scornfully by people who dislike talk about survival. Mere survival implies food, shelter, and reproductive maintenance, but no progress beyond a more or less steady state. It implies no libraries, no written history, no cities, and no agriculture for urban support -- essentially a "hunting and gathering" society. For many thousands of years the Eskimos on the shores of the Arctic Ocean appear to have been archetypal examples of mere survival. But they had pride and standards of behavior. They had a survival bioethic insofar as they had learned over many generations what they had to know about their environment (the philosophers' "is" concept) and what they had to do to survive in perpetuity (the "ought" concept). Life was not too bad. Now the Eskimos have outboard motors and rifles and their future is in doubt. They appear to be doing on a small scale what the rest of the world is doing on a large scale. Primitive societies in desert lands were also able to survive for thousands of years with not too bad a life. Referring to anthropologist Richard Lee, who studied evidence pertaining to natives in the Kalahari desert in South Africa, Yellen concluded that "To be a hunter and gatherer wasn't that bad after all." He also quoted Marshall Sahlins's reference to the Kalahari people as "the original affluent society" and stated that in only three decades a way of life millions of years old has fallen apart [12].

The discovery of the Yanomama tribe in the Amazonian rain forest in the 1950s and the intensive study of them since the 1960s led to an appreciation of their culture and has highlighted lessons we might learn from them [13,14,15]. Many primitive societies have gone from mere survival to miserable survival (see below), as a result of encroachment by white settlers. Meanwhile large segments of industrial societies have gone to irresponsible survival that cannot last. We need to define a survival that will last and be acceptable, sustainable, realistic and global.

2. Miserable Survival

Miserable survival is a state that tends to be identified with the ravages of disease or war, and the toll of malnutrition, starvation, or parasitism. All of these disasters occur in combinations. Jonas Salk stated in a 1984 press conference that "Diseases caused by parasites afflict more than half the world's people. Even when not seriously ill, people who have parasitic disease are chronically sick -- weaker, less competent, less productive, and less content than they would be otherwise [10]. That is miserable survival. Since that occasion the sexually transmitted disease known as AIDS has burst upon the global scene and has given millions of people miserable survival until they die [16]. Today miserable survival can be found in pockets all over the world, including the U.S (1).

3. Idealistic Survival

People cannot agree on the components of idealistic survival, but they can universally agree on the desirability of health and the undesirability of preventable disease. No culture or religion, primitive or modern, has ever placed a premium on, or aspired to, starvation, malnutrition, diarrhea, intestinal worms, or other parasitic infestations. Clearly, the elimination of these scourges is something that all can agree on as a component of idealistic survival [10]. But today we can offer acceptable survival as a proposed goal for idealistic survival: global survival in the form of acceptable survival that is worldwide and sustainable (see below).

4. Irresponsible Survival

Irresponsible survival is doing anything that runs counter to the concepts of idealistic and acceptable survival. Many people have more than any society could duplicate and yet have little concern for people who suffer with miserable survival. This cohort continues to survive from generation to generation with little thought for its miserable neighbors in the short term or for the species in the long term. Overpopulation and overconsumption [2], and the depletion and degradation of the biosphere, are examples of irresponsible survival. The dominant culture has been based on conspicuous consumption that has been coupled with the exploitation and progressive depletion and degradation of the natural resource base. It has been claimed, though not in so many words, that this consumption of material goods, fueled by advertising in a throwaway society, is necessary for employment. The present economic model provides employment at high wages for a privileged few while millions are below the poverty level. The dominant culture is irresponsible and not acceptable. It cannot survive in the long term.

The prime icon of the dominant culture -- especially in the U.S. -- is the personal automobile fueled by cheap gasoline, with millions commuting from home to work with one person -- the driver -- per vehicle. While efforts are being made by some idealists to get the ratio of one-per-vehicle higher, there are really no efforts to decrease the total number of automobiles. Indeed, the automobile industry has thwarted efforts to make mass transportation more available to more people. The industry's goal, rather, is to make automobiles available worldwide to millions of people who now use bicycles or walk. This is madness, but the U.S. fails to provide the world with an example of efficient transportation. In many respects, what we have today, especially in the U.S. is irresponsible survival in the global context and it cannot last.

5. Acceptable Survival

In proposing "acceptable survival" as the goal of global bioethics two questions arise at the outset: acceptable survival for whom and acceptable to whom? And what about another term frequently employed, i.e. sustainable development? The answer to the first question, in the broad sense, is acceptable survival for all the world's people and acceptable to a universal sense of what is morally right and good and to what will realistically continue in the long term. G. G. Simpson, (1902-1984), who was one of the world's outstanding evolutionists, described reasonable outlines of what is right and good in "The Search for an Ethic" and "The Ethics of Knowledge and Responsibility" in his book *The Meaning of Evolution* (2) [18]. He regarded a demand for ethical standards as part of our biological inheritance, implying that there may be genes for receptors for ethical messages [19].

Acceptable survival is a long term concept [11] with a moral constraint: worldwide human dignity, human rights, human health, and a moral constraint on human fertility. Governments must promote voluntary limited reproduction that is compatible with the rest of the biosphere; all these requirements demand economic accommodation in "earth care" and reproductive accommodation in health care. The assumed freedom to procreate as a matter of choice needs to be constrained by reality and

ethics. The dominant world culture at present tends to be quite irresponsible and not acceptable in terms of global survival.

The phrase "economic accommodation" immediately links up with the second question: whether sustainable development would substitute for acceptable survival. It would not, because sustainable development does not implicitly demand moral constraints. Acceptable survival is based on the assumption of moral constraints. Sustainable development carries two ideas: "sustainable" is widely understood to mean economically sustainable. And "development" implies growth, i.e. increase in numbers of successful enterprises and increases in net worth for increasing numbers of people. Sustainable development is an anthropocentric term: the human species is the focus with no clear balance between present and future. Traditional anthropocentrism results in human overpopulation and progressive extinction of other species. Acceptable survival is enlightened anthropocentrism: it calls for control of human fertility and sees the human species in the context of the total biosphere. If the human species is to survive it needs to preserve the natural environment in tracts large enough to permit species diversity.

Two Journals: Sustainable Development and Global Survival

Today we have in the U.S. the President's Council for Sustainable Development, a panel of experts who will need to define clearly the time frame that they contemplate and whether the development they propose is sustainable beyond a decade or two. Their mission is not the same as what might be proposed for a United Nations Council for Acceptable Global Survival, but at present no such council exists at the UN. As in the U.S., the operative phrase at the UN is "sustainable development" and the goal is "strengthening technological capacity in developing countries" [20]. Does increasing developing countries' ability to exploit natural resources serve global survival through sustainable development? The problem is whether "sustainable development" in the 21st century will preclude survival to the 25th century and beyond.

In addition to *Medicine and Global Survival*, another journal was launched in March 1994 called the *International Journal of Sustainable Development and World Ecology*. In the first number of the latter, the lead editorial explained the need for the new journal: "...there are many definitions of the term 'sustainable development'...in the field of economics...the term is frequently translated to mean sustainable growth of national or world economies....By linking sustainable development to world ecology, we also hope to provide a forum...perhaps as a counter to the overtly economic thrust of most of the discussions to date" [21]. Nothing was said about the ethical imperative, although a comprehensive article by G. R. Walter and O. L. Wilkenson in the same journal six months later [22] was identified as "the first attempt" to produce a regional state-of-sustainability report, focusing on three basic dimensions: ethics, competition/cooperation, and conservation. While not going into detail about ethics, the authors bluntly state that "the ethical dimension deals with the issue of what is being sustained and why" (emphasis added). They mention "ethical issues of interpersonal equity" and report omission of "issues of equity between human and natural communities." In conclusion they refer to the need for "the conceptualization of human dignity and welfare, recognizing the role of nature and human stewardship, and embracing a number of economic, social, and ecological elements" in a perspective that must have "a fundamentally ethical character." In a category of health care costs they list low-birth weight children, hospital bed provision, and extent of coverage. Their overall perspective, unlike that of the Friedmans, is not opposition to government planning, but is focused on the breadth and depth of the problems facing society. The authors focus on sustainable regional development while thinking globally. The authors' perspective is clearly congruent with global bioethics.

The motivation for the *International Journal of Sustainable Development and World Ecology* is clearly in line with the thesis here proposed that "sustainable development" is widely seen in the "growth" context and not in the "survival" context. Nevertheless, the opening editorial describing that journal's mission parallels the opening mission statements of *Medicine and Global Survival* [2,3,4,5]. The mission of global bioethics for acceptable survival will be advanced by contributions published in the two journals. The phrase "economic accommodation," is not to be equated with sustainable development but rather with a new term -- "sustainable survival." "Sustainable," the economic term, and "development," the growth term, would be constrained by the requirement that the economy would have to be compatible with long term survival. The idea of sustainable development should be abandoned and replaced by the idea of sustainable survival. The economic matrix should be seen as

a subset of ideas constrained by the overall idea of acceptable survival, which in turn is being proposed here as the agenda for Medicine and Global Survival. It is hoped that the term "global survival" will be taken to mean "acceptable, sustainable global survival."

The Primary Conflicts in the Global Bioethics Matrix

In pursuing acceptable survival in the long term there are two major conflicts: 1) in health care "quality of life" conflicts with "sanctity of human life," and 2) in earth care "quality of the environment" conflicts with "sanctity of the dollar." Here the word "sanctity" is used in one dictionary sense as "inviolable." The two sets of conflicts deal with issues that defy consensus [23]. When consensus is impossible and gridlock is the result, one side or the other has to give a little. The word for that is "accommodation." When one side in the conflict holds an absolute position as implied by the word "sanctity" and the other side has already undergone massive accommodations, it is clear that it is the "sanctity" side that needs to accommodate to the needs of global survival. We need to abandon the idea that all human life must be preserved at all costs even when such life no longer has any possibility for quality in the future. Accommodation may be effected by moral force or political force, or both. Whether the "almighty dollar" outlook will ever accommodate remains to be seen.

For at least the past 200 years, dating from the invention of the steam engine by James Watt (1736-1819) and the development of the assembly line for the manufacture of internal combustion motorcars for everyone by Henry Ford (1863-1947), technology has received top priority in the dominant world culture. Technology has enabled the human species to extract metals and petroleum from the earth, to cut down the forests, to fish the seas, to put a man on the moon, and to use weapons of mass destruction and of individual killing by napalm or landmines. The most amazing part of this is that no one has asked how long this can continue without threatening "global survival" -- the phrase incorporated in the title of this new journal. Heilbroner, in *An Inquiry Into the Human Prospect* [24] and more recently in *Visions of the Future* [25], has discussed the issue without using the phrase. (3)

Of all the professionals who show the least concern about the supply of earth's bounty, the economists seem to be in the forefront [26,27]. Anyone who is concerned for global survival of the human species in the long term must be aware of the relation between increased population, depletion of resources, and current and future religious and ethnic wars. The "almighty dollar" drives international trade in weapons and fuels these conflicts.

We need economists and other professionals who can convince masses of people all over the world that their personal interests lie in the global bioethics matrix that calls for health care and earth care worldwide (4). Acceptable survival that protects human dignity, human health, and human rights demands that personal freedom to choose cannot be used to harm future generations or contemporary underprivileged people. In 1776 it was assumed that future generations, having the right to "life, liberty, and the pursuit of happiness" with the help of "the invisible hand" would inherit a better world. Today that assumption has led to the ascendance of the dominant world culture with conspicuous consumption as a goal. We need to challenge the Friedmans' assumption that any well-intentioned regulation of the pursuit of the almighty dollar is bad. We need a global bioethic that will guide good intentions and harness the will to power. Global bioethics calls for good intentions that are covered by five realistic virtues: humility, responsibility, interdisciplinary competence, intercultural competence, and compassion [29]. If this is too big an order for individual economists and other professionals it is not too much to expect of planning commissions and journals concerned with "the world's most pressing problems" [3]. We need to preserve the good earth and forge the requirements for global survival. We need to specify the requirements of health care and earth care as we follow the pathway set by the editors of *Medicine and Global Survival*.

Footnotes

1. At a conference held in Washington D.C. on January 30, 1995, Dr. Harold W. Joffe of the Federal Centers for Disease Control and Prevention, reported that by 1993 AIDS had become the leading cause of death averaged for all Americans age 25-44, and that it ranked 4th among women. Additional data were reported for the U.S., including deaths to date (250,000 from AIDS or AIDS-related causes)

and data on infants from infected mothers [17]. The increasing incidence of AIDS among heterosexuals confirms the fact that this form of miserable survival threatens everyone.

2. The book represents an expansion of the 25th series of Terry Lectures delivered at Yale University in November, 1948, which had a mandate to lecture on "Religions in the Light of Science and Philosophy" according to the principles of the Terry Foundation: "loyalty to the truth, lead where it will, and devotion to human welfare." Simpson met the challenge and gave us concepts that apply directly to the concept of "global survival" as acceptable, sustainable global survival.

3. In 1974 Heilbroner examined population and ecological issues and concluded that "worse impends" [24]. In 1995 he examined the entire span of human history and considered the future in terms that resonate with the global bioethics vision of acceptable survival and its hurdles: "The population of the globe must be stabilized at levels easily accommodated to the earth's carrying capacity under technological and social conditions that we -- and presumably they -- would find agreeable. Without such a stable foundation, there seems little chance to attain a level of civilization more advanced than our own. The attainment of such a civilizational advance is quite impossible today. It entails the absence of any socioeconomic order, whether called capitalist or other, whose continuance depends on ceaseless accumulation. No less does it depend on the elimination of the divide between the poverty-stricken and the wealthy regions of the globe" [25].

4. We need not only a new breed of economists but a new sense of responsibility for professionals in general, including medical professionals. According to Professor Steven Brint, a sociologist at the University of California, Riverside, profound changes have taken place in professional attitudes. Early in this century professional status was defined as much by a sense of ethical and public responsibility as by specialized knowledge. Today, professionals increasingly define themselves strictly in terms of their command of technical matters, by their marketable knowledge and skills, while they are relatively skeptical about moral certainties [28].

References

1. Potter VR. Bioethics and the human prospect. In: DH Brock, ed. The culture of biomedicine: Studies in science and culture, volume 1. Newark: University of Delaware Press. 1984.
2. Smith R. Overpopulation and overconsumption: Combating the two main drivers of global destruction. *Brit Med J* 1993;206:1285-1286.
3. Smith R, Leaning J. Medicine and global survival: A new journal for the world's most pressing problems. *Brit Med J* 1993;307:693-694.
4. Leaning J. Lest things fall apart. *Medicine and Global Survival* 1994;1:1.
5. Bastian T. Medicine and social responsibility: Tradition and task. *Medicine and Global Survival* 1994;1:2-3.
6. Friedman M, Friedman RD. Free to choose: A personal statement. New York: Harcourt Brace and Co. 1990.
7. Kennedy P. Preparing for the 21st century. New York: Random House. 1993.
8. Kung H. Global responsibility: In search of a new world ethic. New York: Continuum Publishing Co. 1993.
9. Potter VR. Bioethics, science of survival. *Persp Biol Med* 1970;14:127-153.
10. Potter VR. Global bioethics: Building on the Leopold legacy. East Lansing: Michigan State University Press. 1988.
11. Potter VR. Getting to the year 3000: Can global bioethics overcome evolution's fatal flaw? *Persp Biol Med* 1980;34:89-98.
12. Yellen J. Bushmen. *Science* 85 (AAAS). May 1985:40-48.
13. Neel JV. On being headman. *Persp Biol Med* 1980;23:277-294.
14. Neel JV. Lessons from a "primitive people." *Science* 1970;170:815-822.
15. Neel JV. Physician to the gene pool: Genetic lessons and stories. New York: John Wiley & Sons. 1994.
16. Landau-Stanton J, Clements CD. AIDS, health, and mental health: A primary source book. New York: Brunner Mazel Publishers. 1993.
17. Altman LK. AIDS is now the leading killer of Americans 25 to 44. *New York Times* Jan. 31, 1995:B8.
18. Simpson GG. The meaning of evolution. New Haven: Yale University Press. 1947.
19. Potter VR. Global bioethics: Linking genes to ethical behavior. *Persp Biol Med*, in press. Autumn 1995.
20. UN Department of Public Information. Report of the secretary general, yearbook of the United Nations. 1992;46:663-670.

21. Jeffers JNR. Editorial. *The International Journal of Sustainable Development and World Ecology*. 1994;1:1.
22. Walter GR, Wilkenson OL. Information strategies for state-of-environment and state-of-sustainability reporting. *International Journal of Sustainable Development and World Ecology* 1994;1:153-169.
23. Bayertz K. Introduction: Moral consensus as a social and philosophical problem. In: Bayertz K, ed. *The concept of moral consensus: The case of technological intervention in human reproduction*. Dordrecht, Germany: Kluwer Academic Publishers. 1994.
24. Heilbroner R. *An inquiry into the human prospect*. New York: W. W. Norton. 1974.
25. Heilbroner R. *Visions of the future: The distant past, yesterday, today, and tomorrow*. New York: Oxford University Press. 1995.
26. Daly HE, Cobb JB Jr. *For the common good: Redirecting the economy toward community, the environment, and a sustainable future*. Boston: Beacon Press. 1989.
27. Daly HE. Sustainable growth: A bad oxymoron. *J Envir Sci Health* 1990-91;C8(2).
28. Brint S. *In an age of experts: The changing role of professionals in politics and public life*. Princeton: Princeton University Press. 1994.
29. Potter VR. Global bioethics: Origin and development. In: Cothorn CR, editor. *Handbook of environmental risk decisionmaking: Values, perceptions, and ethics*. (In press)