

Can Mankind Achieve a Sustainable Ecosphere?

by

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How Can We Change?

The paper "*SUSTAINABLE DEVELOPMENT, A Mirage and a Dangerous Trap*", (published in the March edition of the CACOR Proceedings) made a point about humans having to change from being egocentric and anthropocentric and become ecocentric in order to achieve a sustainable ecosphere.

What might appear to be the most obvious route for humans to become ecocentric, but for practical purposes may also be an impossible route, is through another evolutionary step which would eliminate their egocentrism and anthropocentrism. In this regard, *homo sapiens* may represent the end of the biological/physiological evolutionary line; the physical characteristics of the human body and its operating systems are already well optimized to its physical environment. The further evolution of *homo sapiens* is not therefore likely to be physical or biological but may be cerebral. That is, in the inevitable evolutionary process, *homo sapiens* may gradually undergo great changes in mental capability and/or in the use of that capability. Indeed he may already appear to be experiencing them.

This evolutionary process must be looked at against the time period of other major evolutionary changes, which were measured in thousands if not millions of years, rather than just years, decades, or even centuries. Consequently, for the practical purpose of redressing the current mess that humans have made of this planet, the evolutionary route is not the answer. But the cerebral developments involved in such an evolutionary process do suggest another route.

The other route through which humans can overcome their egocentrism and anthropocentrism is through the combination of their consciousness, their thinking capability, their instincts, their religions and their education, collectively generating social culture which is transmitted and gradually modified through successive generations. When considering this route, it is helpful to reflect on the cultural aspects of ancient and/or primitive societies relating to the ecosphere, and how this culture has been transformed into the now predominant world-wide assumption that the

ecosphere exists for the benefit of and exploitation by humanity.

Humans as hunter-gatherers, even though egocentric and anthropocentric because of their animal heritage, essentially were, (still are where they exist) just one of millions of other species in a sustainable ecosphere. A general conclusion can also be drawn from anthropology that many primitive societies (there are indeed exceptions) used their cerebral capability to build on their instincts to develop a behaviour which, while attending to the interests of individuals and the species, was conducive to the sustainability of their environment. Moreover, (again generally speaking) such religions as these societies exhibited were spiritual, related to different aspects of the environment. This would seem to indicate that these societies recognized, whether consciously or subconsciously, that they were simple beings in a larger (total) ecosphere, and that they should conduct themselves so as to sustain that condition. This seems to have been the case particularly in small island societies where the obvious limitations of the productivity of the land and the restrictions of the surrounding seas forced such societies, for their very survival, to behave so as to sustain their local ecosystems.

Exceptions to the first generality above occurred when it appeared that thinking humans, questing for the "good life", allowed the egocentrism and anthropocentrism of their animal roots to overcome their ecocentric instincts by such measures as organizing or dominating other species, or cultivating the land, or controlling the flow of water, or utilizing the materials of the earth. There developed an associated consciousness that the ecosphere could be taken for granted, that it existed for the benefit of mankind, that human relations and human well-being were of primary importance, and that thinking humans need not worship the spirits of the environment.

An Inherent Conflict

We see this tendency for the cerebral to overcome the instinctive displayed every day as we humans are constantly experiencing the pull between our "heart" and our "head". Moreover, the conventional wisdom is

that to be logical and rational we should constrain the urges of our "heart" and follow the lead of our "head".

In earlier times when our "head" did not have a comprehensive appreciation of the ecosphere, this suppression of instincts by conscious thoughts resulted in some instances in the demise of societies when they exhausted the capability of their local ecosystems to support them. In other instances where the sustainability of local ecosystems, although disrupted, were not destroyed, the result was the development of egocentric and anthropocentric cultures and ethics, such as predominate in western industrialized societies, are spreading throughout the world, and certainly appear to be in the process of eventually severely disrupting, if not destroying, the sustainability of the planet's ecosphere.

Western societies thus are egocentric and anthropocentric due to their heritage as animals. That is reinforced by their cultures and ethics which are also egocentric and anthropocentric. Because of this combination, western societies, rather than having advanced, have in fact regressed from their primitive (*sic*) instinctive ecocentric beginnings as far as the sustainability of the ecosphere and therefore their own survival is concerned. To compound the problem further, this western culture, by its very egocentric and anthropocentric nature, has spread throughout the world and is in the process of overwhelming any vestige of sustainable ecosphere cultures in what are considered to be primitive and/or underdeveloped societies.

Consequently, for evolutionary reasons, there is an inherent conflict between humanity's egocentrism/anthropocentrism and the ecocentrism required for a sustainable ecosphere. That inherent conflict has been reinforced by predominant and growing cultures and ethics which are also egocentric and anthropocentric. Only by recognizing this situation can the human consciousness exert itself in taking effective action to develop ecocentric cultures and behaviour which not only must battle existing cultures and behaviour, but must also combat our animal egocentric and anthropocentric heritage.

The successful outcome of this internal conflict is that humanity will have changed from being egocentric and anthropocentric and will have become ecocentric. In the transition, mankind will have risen above and beyond the confines of its animal heritage as well as

its developed predominating culture or will have broken through them. If a successful outcome is not achieved, then it will be because mankind has not been able to throw off the double albatross of its animal heritage as well as its developed culture, which are concerned first and foremost with self, family and friends, then with its own species, and only then with the preservation of a sustainable ecosphere, including all of the species therein.

Our "heads" are now conscious of the fact that the total of humanity is only one of several million species in the biosphere, and one element in the inorganic atmosphere, lithosphere, and hydrosphere, with these four spheres collectively comprising the planet's ecosphere. Our "heads" also are conscious of the fact that humanity is in the accelerating process of jeopardizing the sustainability of the ecosphere, through its numbers, its technology and its behaviour. With this knowledge, it should be clear that humanity has no alternative but to ensure that its first and overwhelming priority must be the sustainability of the ecosphere; that is if humanity is truly concerned about the survival of its species, not to mention its responsibility for the state of the ecosphere.

Certainly, many individuals recognize this priority. They recognize the necessity for humanity to make the change to an ecocentric way of life. But they live in a world where all the processes, institutions, values, relationships, etc. have been fashioned under, and certainly reflect, the influence of the egocentric and anthropocentric heritage of their animal roots and of more than 2,000 years of a culture and ethics which have the same orientation. Consequently, changing contemporary western culture and behaviour to that conducive to a sustainable ecosphere will require not just tinkering with existing processes, but rather building anew all the elements of western society on an ecocentric foundation.

The rebuilding of western cultures and behaviour along ecocentric lines is not likely to be achieved in much less time than the thousands of years that it took to develop existing western culture and behaviour. If this is a reasonable appreciation, the horrifying question is whether there will be anything left of the ecosphere to benefit from such a revolutionary change in human culture and behaviour by the time it is sufficiently developed. Will humanity not have wrecked the planet before there is enough of a change

in human behaviour to slow down, then stop, and finally reverse the destruction?

This progression of thinking leads one to reflect on all the processes of western society: of philosophy, learning, science and technology, economic principles, enterprise, government, justice, etc. which must be changed to reflect an ecocentric foundation as their existing mode of operation has developed from animal roots and developed cultures which are egocentric and anthropocentric. Because the egocentric/anthropocentric forces are so firmly established, while the ecocentric forces are so shallow and so primitively developed, it certainly looks as though a complete rebuilding of all these processes of western societies on an ecocentric base would be a daunting, and perhaps even an unachievable transformation.

The Key Issues

The revolutionary departure from such a required transformation, and the monumental dimensions of it, can readily be appreciated by reviewing just a few of the key issues.

In democracies, the interests of the bulk of the voters are extremely short termed and will likely remain so. They are concerned primarily with improving material standards of living and easing what are seen as the rigors of every day existence. That materialistic, egocentric behaviour of voters is also exhibited by politicians, whose interests are also extremely short term due to the constant pressure of re-election and the necessity to respond to the here-and-now interests of their constituents. Beyond the immediate interests of the electorate, the politicians' only other concern is about the nation's place in world affairs. The net result is that democratic governing is inherently bound to be almost totally egocentric and anthropocentric, and considers the ecosphere only when forced to do so. Is it credible that humans will elect governments which make the sustainability of the ecosphere an overriding constraint on all their actions? However, that is the type of governing which must evolve if there is to be a sustainable ecosphere.

Most of the great philosophies are egocentric and anthropocentric. They are concerned with human relationships, while ignoring the fundamental fact that humanity exists as one simple part of a total ecosphere. The most important relationship which should concern humanity and its philosophers is hu-

manity's relationship to the rest of the ecosphere. If humanity is to revert to being ecocentric then there would seem to be no alternative to discarding, or setting aside, many of the respected philosophies. They must be replaced by philosophical thinking founded on the premise of humanity as one element in a sustainable ecosphere. The essence of these comments on philosophy also apply to the necessity to orient predominant religions to humanity's relationship with the ecosphere, rather than the current emphasis of human-human-God relationships.

Science and technology as practiced in western societies is also egocentric and anthropocentric. For a sustainable ecosphere, the first concern of science and technology will have to be the preservation of that condition, in contrast to the current emphasis on the well being and better life of mankind. Such a transformation would require a revolutionary change in many if not most science/technological fields such as agriculture, transportation, energy production and consumption, forestry, fisheries, mining and metal production and processing, and the production and use of man-made chemicals which are alien to the ecosphere, just to mention a few.

Contemporary economic wisdom is another example of humanity's egocentrism and anthropocentrism. Economics takes for granted, and as a zero cost commodity the capability of the ecosphere both to produce the materials for and accept the wastes of humanity's way of life. If humanity was ecocentric, then the primary accounts and reports of interest to individuals, society and governments would be the state and trends of the sustainability of the ecosphere, rather than the current situation of voluminous and seemingly endless reports of the financial and conventional economic conditions. Trying to recognize the ecosphere by tinkering with conventional economic theory, or enlarging economic accounts is not the solution as the fundamental ecocentrism and anthropocentrism will remain. Required is the development and teaching of a new comprehensive set of theories and associated set of accounts, based on the premise of a sustainable ecosphere, concerning material transactions as well as the related trends and conditions. This new wisdom may be called economics, but it will be profoundly different from the practice which currently bears that name.

The perceptions of the previous few paragraphs indicate that our current educational system is clearly ecocentric and anthropocentric, with token attention being paid to ecology as just a branch of biology, while the ecosphere is only a word and a concept which is seldom, if at all, a subject of educational interest. If humanity is to become ecocentric, then obviously our entire educational practice must be rebuilt with that orientation. Essentially, the first subject after learning the three tools of education (reading, writing, and arithmetic) would have to be, at each level of education, an increasing comprehension of the ecosphere; what it comprises, how it functions as a system, how humanity relates to it, and how to preserve its sustainability. Only with such an ecocentric foundation would it then be meaningful to proceed with any further education whether in the humanities or the physical and social sciences.

Report Card

Having reviewed some of the major aspects on which there would have to be a profound transformation from prevailing practices in order to achieve a sustainable ecosphere, it is pertinent to assess whether any significant changes have taken place in the manner in which humanity has already addressed environmental issues.

There is every indication that 'when push comes to shove' regarding the immediate interests of humanity versus the interests of a sustainable ecosphere, then human decisions and actions are directed to the former. That is so, even if it means that in the long term there will not be a sustainable ecosphere; at least not the ecosphere which has supported life as humans have experienced on this planet. This *ipso facto* means at best an apocalyptic impact on, and even the possible demise of *homo sapiens*.

The basis for this perception lies in an assessment of such efforts as mankind has made to redress the mess that it has made of this planet. So far, these efforts have been directed first and foremost to correcting situations where the deterioration had become objectionable because of interfering with the immediate interests or gratification of humanity. In no instance that comes to mind can it be said that humanity has taken action primarily to re-establish a sustainable ecosphere. Moreover, such action as has been taken to redress environmental conditions has invariably been fashioned so as not to forego any human benefits

or human gratification. To support this appreciation, just look at examples like the "Love Canal" and similar toxic waste disposal cases; the reduction of urban smog; the correction of the trend to stinking and lifeless rivers which were being used as open sewers for the disposal of the wastes of human activity; the clean air and acid rain legislation; the effort to avoid destroying the ozone layer. Or, finally, the action taken to control fishing or forestry to avoid depleting renewable resources beyond their recovery levels. All these actions have fallen far short of what would be needed to save the ecosphere.

While the progress on each of the examples noted, as well as with other similar cases, is not to be trivialized, in each and every such case, to be acceptable, the corrective action has had to be of such a form that it did not result in human hardship, or the foregoing of human gratification. That attitude also explains why humanity is having such difficulty in trying to come to grips with the reduction of CO₂ atmospheric emissions without involving a deterioration in life styles. If corrective action is "going to hurt", then it will not be politically acceptable and will not be done. 'When push comes to shove', the ecosphere will take second position to immediate human interests.

There have been instances where proposals for new projects have been rejected because of assessments that these projects would be detrimental to the human image of a healthy environment. However these instances have not resulted in imposing new hardships or penalties but have only required foregoing the possibility of improving the human condition at some point in the future. Moreover, it is a moot point as to whether the possibility of achieving a sustainable ecosphere would have been greater with or without some of these projects. For instance it can be questioned whether it would be better to build new hydro, or nuclear electrical generating plants, rather than the coal burning plants which have been and are being built to meet the growing demands for electricity.

If these profound transformations are required for humanity to become ecocentric, and if humanity gives no indication so far of giving priority to a sustainable ecosphere, then what is the prognosis?

What is the Prognosis?

If *homo sapiens* is to continue to be one of the species on earth, then what will be the transition from the current state of affairs to one of a sustainable ecosphere?

How will mankind change from a population growth of 100 million a year which is moving towards an indicated level of 10 to 14 billion and move back to a sustainable population of perhaps 2 billion?

How will agricultural practices revert to a form which will be sustainable and still be able to feed the burgeoning world population?

How can the terrible deterioration of air and water quality be reversed as is required for a sustainable ecosphere, particularly in the context of an exploding world population, compounded by a greater per capita demand for clean air and water?

These are just a few of the mega issues where profound, if not revolutionary changes are required to achieve a sustainable ecosphere. Will these profound changes be achieved in an orderly manner; will they be undertaken at the conscious will of mankind; or will they be thrust upon humanity, as the ecosphere simply revolts and its normal functioning breaks down under the over burden of human numbers and the magnitude of human activities in resource depletion and waste production?

When the totality of the transformations which will be required are considered holistically and in the context of previous comments, the logical, reasonable and also responsible conclusion cannot be other than that the conversion to an ecocentric humanity will not be orderly. For the mind boggling dimensions of the required transformations to be achieved in an orderly manner would imply that mankind has made the type of evolutionary change that has already been noted as likely to require eons. Cultures have tremendous homeostasis and resistance to change and this is evident in the way that humanity has dealt with environmental issues up to now.

It follows from the above that achieving the required transformations through cultural change will be disorderly and will be brought about in a series of ever more serious disasters of growing severity and increasing frequency. Mankind will react to each one with an equally increasing severity, and with a greater

departure from conventional values and morals. Those who survive this process of population reduction and the associated change in human activities to an ecocentric behaviour which will result in a sustainable ecosphere will have made the change, not by cerebral evolution which would take eons, but by the exercise of human consciousness which can be achieved in just decades.

The concept of triage will enter into more and more human decisions with a corresponding reduction in what has been the sanctity of the individual human life. There will also be increasing rejection of long established wisdom and conventions about personal rights, about precedence in jurisprudence, about the concepts of ownership of property, and about the sovereignty of nation states as the emphasis of humanity changes from that of the individual, the species and the society of mankind to that of the collectivity of all aspects of the ecosphere and humanity's part therein.

The paper, "Tough Decisions" published in a previous issue of the *CACOR Proceedings* was directed to causing readers to think about this matter and about the related type of decisions that would be involved in moving from the current deteriorating situation to that of a sustainable ecosphere. Essentially, the type of decisions contained in that article as well as those which will be required to achieve a sustainable ecosphere will involve giving supremacy to considerations for the ecosphere, even if they involve some "hurt" to and loss of gratification for humanity. That would be a far cry from the conventional decisions which are directed to the relief of human suffering and the immediate welfare of mankind even if such decisions result in actions which jeopardize the achievement of a sustainable ecosphere.

It is difficult to think about and discuss this matter of whether humanity can put its immediate self interests ahead of concerns for the sustainability of the ecosphere without sounding like doomsday or apocalypse. But such thinking and discussion should not be avoided if we are to be true to ourselves. If this issue of redressing the destruction which humanity is inflicting at an accelerating rate on the ecosphere cannot be approached through an ecocentric consciousness and with the human conceptualizing capability which sets humanity apart from (but not superior to) the rest of the planet's biota, then a more or

less orderly redressment of the nonsustainability of the ecosphere appears to be impossible.

Much as it may be disturbing to pursue these lines of thought about cerebral evolution of *homo sapiens*, it may be that this is the way that such an evolution is bound to, or can only occur, i.e., not in an orderly manner, but in more or less an explosive or apoca-

lyptic manner. Those who do not or can not make the adjustment to this evolutionary step will disappear according to the "survival of the fittest", just as Darwin might have suggested had he continued his work into assessing and commenting on the future of evolution of *homo sapiens*.

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List of Books

Books by Aurelio Peccei:

1. *The Chasm Ahead*: Macmillan, NY (1969)
2. *The Human Quality*: Pergamon Press (1977)
3. *One Hundred Pages for the Future*: Pergamon Press (1981)

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7. *Reshaping the International Order*: by Jan Tinbergen; E.P. Dutton and Co Inc. NY (1976)
8. *Goals for Mankind*: by Ervin Laszlo et al.; E.P. Dutton Co. NY (1977)
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11. *No Limits to Learning*: by Botkin, Elmandra and Malitz; Pergamon Press (1979)
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13. *Road Maps to the Future*: by Bohdan Hawrylyshyn; Pergamon Press (1980)
14. *The State of the Planet*: by Alexander King; Pergamon Press, (1980}
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16. *Crusader for the Future*: by Gunther A. Pauli; Pergamon Press, (1988)
17. *L'homme et la croissance*: by Eduard Pestel; *Économica*, (1988). (Also available in English)
18. *The First Global Revolution*: by Alexander King and Bertrand Schneider; Pantheon, (1991)

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19. *Global 2000: Implications for Canada*: by Barney *et al*; Pergamon Press, (1983)*
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22. *Planet Under Stress*: Edited by Mungall and McLaren**; Oxford Univ. Press, (1990).

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