SUSTAINABLE DEVELOPMENT: A HISTORICAL AND THEORETICAL EXPLICATION*

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The buzz word 'sustainable development' has created considerable debates since its inception in the 1970s. The issue continues, confusing and muddled as it is, to be the rallying point of environmentalists, policy-makers, businessmen, indigenous peoples, and others. Social scientists, as of late, have joined the chorus.

This paper has three complementary objectives: First, to give an overview of the myriad definitions of the concept and practice. The problematic in obtaining the definitions of development bring to fore the conflicting orientations, goals, and conditions for sustainability.

Second, to underscore the fact that the non-agreement among proponents brings us farther from the goal. This necessitates an explication of the history of sustainable development and of ecological thinking itself. This is given in the hope that social scientists will eschew the neutral ground in the pretext of objective social science.

Third, to outline the strong pro-human, ecological-ideological stance as affirmed by the resolutions of the Earth Summit conference at Rio de Janeiro. Ecological theory and praxis involve a struggle against individual and corporate selfishness.

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Sustainable Development: Concept and Practice

The spate of literature on the concept reveals its growing popularity. However, very little agreement is reached on the fundamental issues involved showing that the goal of sustainable development is far from realization. This is the contention of Diana Mitlin in her comprehensive survey of literature on sustainable development.[1]

She underscores, among others, the controversy between the North and the South on the very definition of the term. The North concentrates primarily on 'sustainability' rather than on sustainable development, i.e., how environmental constraints may be overcome while maintaining present standards of living. The South loathes the fact that the need for development of all peoples in terms of insuring their survival is ignored or given little attention.

The conditions for the attainment of sustainable development, are in themselves, also undergoing intensive debate. One group says that economic growth is essential to provide the resources for basic developmental needs to prevent further exploitation of natural resources. They say poverty is responsible for environmental degradation.

The opposing group says that economic growth is incompatible with sustainability. Continued economic growth inevitably leads to environmental degradation somewhere else in the globe where the resource base is located.

Definitions

The situation being such, the components of the definition of sustainable development can be narrowed down to 1.) the meaning of development as a composite of economic growth and/or basic needs and rights; and, 2.) conditions necessary for sustainability.

The all and sundry definitions put forward by the different Commissions and individuals are as follows:

The World Commission of Environment and Development, in their report entitled *Our Common Future* (1983), emphasizes the obligation of all human beings "to ensure that it meets the needs of the present generation without compromising the future generation to meet their own needs."

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[1]Most of the contents in this section are lifted from the article of Mitlin entitled, "Sustainable Development: A Guide to Literature," published in *Urbanization and Environmental* 4(1) (1 April 1992). A number of the books and articles reviewed by her were not available to the writer (a predicament of Third World scholars) which, otherwise, would have rendered this paper more comprehensive.

"The critics of 'growth ideology' argue that the attractiveness of the concept of sustainable development arises from the recognition that the present levels of per capita consumption underlying the economies of the US and Western Europe cannot be generalized as applicable to all living peoples in contemporary societies, much less to future generations without destroying the ecological resources upon which economies depend."

The World Conservation Strategy, on the other hand, focuses on conservation to "maintain essential ecological processes through the preservation of genetic diversity and to ensure the reasonable utilization of species and ecosystems." This definition has received criticisms because of its focus on sustainability of environment rather than on sustainable development. It is faulted for paying very little attention to the political and economic forces behind the unsustainable or excessive and wasteful lifestyle of the western world.

The subsequent definitions by individuals from different persuasions revolve around economic and mathematical models and the vehement reactions to these.

Pearce, et al. (1989) give an economic definition of sustainable development that requires policies that would enable the future generation to have as much wealth (stocks of environmental assets or otherwise) as the present generation receives. They distinguish economic growth in terms of Gross National Product and economic development. The latter is being examined in terms of the requirement that one generation leaves a constant stock of assets to subsequent generations.

Pezzy (1989) describes a number of definitions of sustainability and development in a mathematical model. He differentiates measures of development based on output, consumption, and utility. For him, sustainable development requires welfare that is above the minimum level of growth, but that growth should be ecologically sustainable.

The corresponding critics of 'growth ideology' led by Dally argue that the attractiveness of the concept of sustainable development arises from the recognition

that the present levels of per capita consumption underlying the economies of the US and Western Europe cannot be generalized as applicable to all living peoples in contemporary societies, much less to future generations without destroying the ecological resources upon which economies depend.

The work of Dally is instrumental in moving the debate from individual project planning to macro-level policy-making. The term 'sustainable development' was originally used by funding agencies in assessing whether development projects, proposed by non-governmental organizations and people's organizations for funding, will continue to function even after the funds have been used up.

Redclift's (1987) definition takes the two opposing intellectual traditions into consideration: those concerned with the potential for development contained within nature itself and those concerned only with nature.

For Redclift, sustainable development is more than just a compromise between the natural environment and the pursuit of economic growth. It means a development which recognizes that the limits of sustainability have structural and natural origins. Different perceptions of environment are "socially constructed and supported by groups with different degrees of power and conflicting economic interests."

Two other authors gave a critique to the concept and touched on an important approach to sustainable development. Adams maintains that sustainable development is an immensely synthetic concept in which different ideas on development can be grafted on with apparent ease. This is because sustainable development has no theoretical core. It is not the strength of the concept but the relative ease with which all things can be said to be sustainable development. Adams cited the amenability of the British government to sustainable development because it does not require major policy changes.

In the final analysis, sustainable development for Adams is not only about the way the environment is managed, but also a question of who has the power to decide how it is managed. In development, the exploitation of nature is part of a wider economic and political process. The only way to strike a balance in the relationship between nature and development is through a radical political economy.

Central to his definition is the stress on the poor people's right to exist on their own terms and that sustainable development is just the beginning of a process and not the end.

Rees (1989) suggested that sustainable development be approached through a 'bottom up' decision-making process. Though this is not integral to the

definition, the participatory approach is picked up by several authors. This may provide the best political framework to allocate and manage environmental resources.

Origins of the Discussions on Sustainable Development

One may wonder how conflicting interest groups came up with the term sustainable development with different definitions and meanings in mind.

Mitlin traced the origins of the discussion to the 1970s with the publication of Meadows, et. al., *Limits to Growth* (1972), *Only One Earth* (1972) by Ward and Dubos which they prepared for the UN Conference on Human Environment in 1972, and Schaumcher's *Small is Beautiful* (1973).

Both Babier (1987) and Pezzy (1989), as quoted by Mitlin, agreed that the pioneering work of Meadows, Ward/Dubos, and Schaumcher made the clarion call warning the global community that economic growth must run into decisive bottlenecks against the perspective of the environment.

Babier identifies the two strands that are evident in the three great works: firstly, there is the stress on the 'basic needs' approach in the efforts to help the poor; and secondly, 'real' development should be consistent with local socio-cultural values and be pursued with due consideration for the physical environment.

Other authors look as far back as the 15th up to the 19th century in tracing the development of the concept. Redclift (1987), for instance, traced the debate to the development of the social sciences. He pointed out the role of this in delineating the relationship of the environment/natural sciences in human societies. In the 1950s, there was already a growing awareness that population groups and communities might not be able to recover from the damage they do to their habitat.

Grove discussed the changing conceptualization in Britain in the 16th to the 18th century.

Drawing on a number of sources including nature conservation, tropical ecology, and managerialism, Adams (1990) explained the evolution and development of the popularity of sustainable development in relation to the growing awareness of and attempts to respond to environmental constraints.

Mitlin, still quoting Adams, showed that the increased contact with various specializations and disciplines began to lay the foundations for sustainable development. Forestry in the 18th and the 19th century, for instance, drew on growth biology to develop such concepts as sustainable yield (the amount of timber which can be extracted from the strand on a regular basis for perpetuity). Economics looked into the implication of sustainable yield policy (rate of time preference and opportunity cost of capital). It also explored the value of non-marketable forest products.

Interestingly, the neo-Malthusian perspective, which rests on Malthusian conclusions formulated in 1798, finds its expression in lobby groups concerned with over-population. This is the basis of the North's agendum on population control. Malthus maintained that a population cannot exceed its resources without famine or disease providing a natural check on population growth.

Political science stressed the need for policy changes and explored the concept of power. Participation in ecological planning, use of appropriate technology, and the demand for the satisfaction of basic needs are among the issues addressed by political science.

Adams and Redclift pointed out that the Marxist approach is unable to take adequate account of environmental goods. Both claimed that society-nature relationship are much broader than what Marxist theory allows.

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This is of course contested by authors of Marxist orientation. Leiss (1972), Gray (1991), and Contreras (1992) to mention a few, extensively discussed environmental degradation as a result of domination and hegemony by First World countries.

Adams, however, offers a general discussion on the relationship between 'red' and 'green' thinking.

Literature on 'deep ecology' shows that the debate goes beyond political economy, questioning the very tenets of scientific rationality. It upholds the inherent rights of every species (including disease-causing microorganisms)* to a sustained existence, independent of their instrumental value to human beings.

The apologies of deep ecology has intensified the debate on sustainable development, putting policy makers and planners into a dilemma: *should sustainability be for people or for the biosphere?*

*Parenthesis supplied.

Responses to the Dilemma

To make sense out of the concept of sustainability, Mitlin, in her review of literature, examined specific instances where the concept is applied.

A discussion of the concept first appeared in the Stockholm Papers, entitled, *Natural Resource Management* (1980), where questions like-- *does this apply to individual species or to whole ecosystems?* -- were tackled.

Later developments showed that the term was used to seek funding or aid. For instance, projects by the Swiss Directorate for Development Corporation focused on funded projects with two criteria in mind:

1.) project sustainability where time is limited but with lasting sustainable outputs, and,

2.) prospects of achieving autonomy and self-reliance.

Conway and Babier (1990) defined sustainability as "the ability to maintain productivity whether of a field, a farm, or a country/nation in the face of shock or stress." Three criteria were raised in agricultural development:

1.) productivity (absolute amount produced)

2.) stability (how reliable is production)

3.) equality (all receiving an equal share of the produce)

On project sustainability, Pezzy (1989) brought out another criteria: long term, derived from inter/intra generational justice, acting as constraints. However, Pezzy is vague as to the system to which sustainability is to be applied. Questions whether the projects should be sustainable or whether they should be made to allow for trade-offs are not addressed.

The concept of sustainability was later extended beyond ecological areas and to the social sphere. Social conditions and structures for achieving ecological sustainability were targetted -- the requirements for institutions to come up with agreements and policies providing for structures that would ensure replacement of renewable resources.

The discussion on changing social structures was given emphasis for the simple reason that they perpetuate the lifestyle of extreme exploitation and wastefulness. Criteria, imposing limits on human systems, had to be set. It was argued that, after all, human beings have an immense capacity to adapt compared to the limited capacity of the natural environment.

Achieving Sustainable Development

Different commissions, notably from the United Nations, came aborning with the aim of achieving sustainable development.

1.) In 1983, the UN World Commission on Environment also known as the Brundland Commission brought to fore the seriousness of ecological destruction and the corresponding no-nonsense policy measures needed. Among others, it reconciled the North and South controversy enjoining the whole of humankind to take responsibility for *Our Common Future* (1983).

This appropriate title of the Brundland report underscores the fact that development and environment is a single issue. It espouses, therefore, the policy of ensuring sufficiency of food to every human being while, at the same time, protecting the disappearing species and the threatened ecosystem.

It recognized the need to meet global energy demands for industrial growth, including urban development that meets the needs of all citizens, without causing environmental degradation. All these necessitate population control and development of existing human resources at the national and regional levels.

The international environment policy provides that global growth be accompanied by redistribution (not in terms of aid but of just and equitable economic relations).*

There is, lastly, the need to arrive at new forms of managing global commons in order to reduce military expenditures and the risk of war. War and its armaments are the best destroyers of nature. Institutional change is imperative to achieve all these.

2.) The Latin American Caribbean Commission on Development and Environment came up with *Our Common Agenda* (1991) where the interdependence of the North and the South is underscored even as it traces the development problems of the region to the hegemony of the North. The focus of the report, though, is the alleviation of poverty based on the use of the region's natural resources. It emphasizes the imperatives of changing socio-politico-economic institutions as well as technological apparatuses if development is to be sustainable.

3.) The World Health Organization Commission on Health and Environment published *Our Own Planet Earth* (1992) which discusses human health maintenance and improvement.

Noteworthy is the Commission's emphasis on the mutuality of meeting health needs and ecological sustainability. It is asserted that health is directly related with a high consumption type of lifestyle. On the contrary, simple living and balanced intake of food, proper exercise, fresh and clean air and environment

*Parentheses supplied.

are what are essential in eliminating health problems: disease, premature death, injury, etc.

4.) *The World Conservation Strategy* (1980), published by the International Union for Conservation of Nature and Natural Resources (IUCNNR), focuses mainly on the conservation of resources. It points out the reality of resource limitation and the carrying capacity of ecosystems. This necessitates strategies on living resource conservation in order to maintain ecological processes, preserve genetic diversity, and ensure sustainable utilization of species and ecosystems.

Though highly criticized, the IUCNNR's thinking has contributed to the critical evolution of sustainable development. Learning from the criticisms, IUCNNR after the decade, published *Caring for the Earth, A Strategy for Sustainable Living* (1991). The IUCNNR expanded from mere conservation to social and economic concerns that provide real improvements on the quality of life. The whole concept is utopian, according to Mitlin, but nevertheless attainable; in fact it is the only rational course of action.

"There are those who maintain that sustainable development and economic growth are not incompatible. In fact, they point out that economic growth is not only compatible but essential to the protection of the environment. This view, however, rests on high technological progress and appropriate resource conservation policies."

5.) The Environmental Concerns and Commonwealth Commission is composed of a group of experts on the perspectives of Commonwealth countries. They take up the concerns of small states and the gender aspects of environment and development.

On the whole, the issue of sustainable development is juxtaposed with economic growth. There are those who maintain that these two are incompatible. There are those who hold that the latter is essential in achieving the former. The geographic focus of the contenders in the debate determine their stand. Proponents from the North tend to stress the limits to economic growth while those from the South tend to stress the need for growth.

There are those who maintain a third view, i.e., that sustainable development and economic growth are not incompatible. In fact, they point out that economic growth is not only compatible but essential to the protection of the

environment. This view, however, rests on high technological progress and appropriate resource conservation policies.

The debate can be brought to brass tacks by assigning monetary values to natural resources and ecosystems to aid economic decision-making.

The preoccupation with biodiversity rests on the economic potential of useful tropical plants which, when converted to pharmaceuticals, would bring millions to business corporations. Gray (1991) sounded the warning signal to the indigenous peoples, whose ancestral lands abound with these plants, to prevent usurpation by multinational corporations.

Cupping her review of literature with a resume on the Third World type of sustainable development, Mitlin points out the fact that this is dominated by donor agencies.

The guiding philosophy is premised on the fact that the grinding poverty of peoples is the source of environmental degradation. They exhaust their natural resources to keep themselves from starving.

Again two groups are seen vying for recognition in their approaches. There is the group that limits the strategy to livelihood programs that would guarantee the immediate satisfaction of needs and provide security with low risk. Projects include sustainable livelihood, appropriate technology and industry, human settlements, and other institutional development concerns.

The other camp, however, stresses the point that sustainable development goes beyond local focus. Central to their argument is the role of international structures that limit the possibilities of the local economy. The unequal trade relations including debt crises imposed by the World Bank and the International Monetary Fund are major constraints to sustainable development.

Third World authors are one in pointing out the impact of colonization on the environment. Expansionism or colonization was undertaken primarily to search for and exploit raw materials to support the industrialization of Europe.

Historical-Philosophical Perspectives of Ecological Thinking

The imperatives of this section stem from the problematic of sustainable development itself. Even as the debate goes on, environmental destruction in the world over is unabated.

The realities of global degradation have a long history. Leiss (1972) claims that as complex and momentous as they are, they are only the symptoms.

Modern mind-set relegates the problem, and the survey of literature bears this out, within an unexamined frame of references -- Science and Technology. These will surely take care of the environmental problems. Not for free, of course. Economic calculus has it that human beings themselves should foot the bill and only those who are willing to pay the price can enjoy the commodities that used to be free -- clean air, blue seas, crystal streams, productive land, virgin forests, milder climate, flowery meadows, etc.

No sufficient solution exists at the moment. Definitely, the techno-economic approach which creates more problems and sucks every participant in the debate deeper into the dilemma is not the solution.

Social science, specifically anthropology, tells us that human beings found themselves, in the early periods of their existence, one with Nature. There was a deep kindred spirit to the point of reverence, awe, and wonder. Humans, in turn, were nurtured by her, as it were, to the point of prodigality. Self-consciously and reflectively though, they attuned themselves to her rhyme and rhythm.

Over time, through the growth and complexification of the human brain, caused and effected by keen observations of the surroundings, actual labor and experiences, humans learned more of the secrets of nature. These experiences stored as knowledge and learning in the brain were in turn creatively applied as humans moved up the evolutionary trajectory. The resultant concepts and ideas took on concrete forms and structures, the totality of which we now call Culture.

Through extrasomatic forms of adaptation, humans learned to imitate Nature in her nurturing capacity. Humans learned to produce food, use and manufacture tools, build shelters, use fire, and harness other forces of Nature.

In all these endeavors, that part of culture which captures and translates human reflective capacities on the non-material levels was given predominance. Humans at this stage, contrary to modern speculations, were not brutes, barbarians, or savages in the connotations we know. They were deeply spiritual. They were oriented to the transcendent, to the world of the spirits which to them pervaded and is the source of the forces of Nature, including human nature.

It goes without saying that because of this orientation their life was unfragmented. Whether in war or in peace, in plenty or in scarcity, in the pursuit of their daily subsistence, their life was one integral activity. They were animated with a desire to appease and to be in harmony with the transcendent, with Nature, as well as with their fellow humans.

Peter Farb (1975) gives a comprehensive description of the techno-economic dimension of culture. The hunting-gathering stage, which covers the longest span of years in the evolutionary trajectory, lays the foundation for subsequent development, including our modern industrial stage.

While it is true that this techno-economic form of subsistence and the population density (10 Million human beings all over the globe until some 12 thousand years ago) may not have been that taxing to the ecosystem, the behaviors developed during the ascendancy of this form of adaptation have minimized the disruption and damage to the environment.

The primacy of sharing, cooperation, and other altruistic behaviors offset the effect of intensive exploitation. Even a small band numbering a few dozen people is likely to over-harvest and so experience the 'imminence of diminishing returns.' They pay the price of longer man hours in hunting in farther places or having less food intake.

Contrary to the claims of Thomas Hobbes (*Leviathan*, 1651) and Mark Twain (*Roughing It*, 1871) that hunters-gatherers had no society, society and social groups were extremely important to them.

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It goes without saying that extreme individualism and its accompanying vice of hoarding and possessiveness inimical to common living were then unheard of. The intuitive fear of violence springs from the fact that such tendencies pose a threat to their social group.

The onset of food production, first by shifting cultivation and later by permanent agriculture, marked a quantum leap in the progress of human kind. The effects on nature and human nature were unprecedented. More fundamental changes in human ways of life occurred in the preceding three million years.

Braidwood (1975), Fagan (1974), and Flannery (1973) claimed that there was a sharp increase in population and qualities of both plants and animals as a result of domestication. Wild sheep, for instance, have very little wool compared to domesticated ones. Wild cows produced limited milk and only when nursing. Certain species like corn, date palms, and bananas would have become extinct without human intervention in propagating them.

Increase in food and in human population were the hallmarks of this stage. The trade-offs, however, were enormously devastating. Vast tracts of forest land were cleared, irrigated, and planted with grain, beans, and squash as exemplified in the New World.

The increase in population, whether the cause or the consequence of food production, brought with it the scourges of epidemics, famine, conquest, and warfare. Contests for arable lands ended in the subjugation of one group by another. This became the order of the day, even as these lands became the breeding places of disease-carrying vermin, ticks, fleas, and mosquitoes. The fowls, including cows, pigs, and other animals that were domesticated carried with them pathogenic microorganisms that caused pulmonary tuberculosis, anthrax, and parasitism to name a few.

More important than the power to facilitate and enhance biological processes was the power to alter the properties of matter. This is manifested in the manufacture of tools from ores, pottery from clay and soil, etc. All these brought a profound intellectual awareness and new confidence in the human beings' capacity to satisfy their needs and wants. This, in turn, created tremendous impact on the environment and made more complex and aggravated the chain of reactions on the socio-political-ideological dimensions of human existence.

Once underway, human existence was never the same again insofar as its sustainability is concerned. The transformation of societies in all their cultural dimensions could not be held back. The trajectory travels faster than ever, wreaking havoc all the way. By hindsight, it can be said that the transition from the hunting-gathering mode of adaptation to food production was a wrong turn for humankind.

The succeeding periods of industrialization/modernization rode roughshod on the same path in the trajectory. This augurs well for the final destruction of the planet Earth unless humankind decides otherwise. The double-edged character of the agricultural stage is magnified a hundred times given the sheer pace and scope of change in the age of modernity.

It is instructive to retrace our steps to the 17th century when, with the ascendancy of Christianity, the attempt to take full control of nature to satisfy human wants and needs was taken seriously as a divine mandate.

Here the historical delineation of ecological issues will take on ideological and epistemological overtones.

The preceding period, characterized by the spread of the Greco-Roman cultures into the known world, gave us an inkling into their world view as expressed in their myths. With the revival of classical learning, these myths, including the biblical creation stories, were used by philosophers like Bacon to push their ideas of probing into the secrets of nature in a more systematic and orderly manner.

The drive to dig deeper into nature's way using what we now call the scientific method, was a reaction to the prevailing mode of inquiry -- magic.

Magicians, the prototypes of modern-day scientists, were regarded highly and taken as advisers to the kings and nobles and were in fact more powerful than the rulers (Leiss, 1977). Bacon sought to encourage intellectual pursuits through royal patronage. He won his cause, however, through the indestructible apology which struck at the heart -- the strong christian sentiments which swept Europe at the time. The biblical quote in the book of Genesis "to subdue the earth and all that is in there" was to be concretized in a serious study, by all and sundry, of the processes of nature and how they might serve human beings.

Descartes and Newton, the other two of the triumvirate, who though existing at different centuries, coursed history to where we are now. They stressed

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the importance of mathematics in understanding and translating the laws governing nature into a concise and orderly paradigm. This extends to the terrestrial and celestial laws of gravity and motion which finally ushered in the wholesale transformation of nature (Leiss, 1977; McDonaugh, 1991; Ferkiss, 1969).

The mechanical paradigm did not merely push the *Homo Faber* to create new machines and effectively control the planet Earth. It also changed the manner in which we view everything on Earth, including ourselves. This is best seen in the politico-economic dimension of our life. McDonaugh insightfully points out the manner in which we view the Gross National Product (GNP). This economic indicator of progress merely tells us the speed at which the manufacturing and service sectors take natural resources, process them, speed them through the market, and in a few years, discard them in a heap. It does not tell us the interchange of goods and services between all species in the life community. It surely does not reveal the domination of human beings of other species and even of other fellow humans.

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Implications and Conclusions

The unique contribution of social science, and anthropology for that matter, to the proper understanding of ecological problems and the proposed solution of sustainable development lies in its tradition of holistic, comparative, empirical and historical, or evolutionary approaches.

What we have done briefly is to approximate these approaches. It is instructive to look afresh into these tenets. Ferkiss (1969) insightfully brings out the idea of a new holism, new naturalism, and new immanentism in his critique to the technological world view. It is summarized here by way of concluding this paper.

New Naturalism. At the expense of being labeled as atavistic, Ferkiss, a political scientist at that, suggests not to regard nature/physical environment as inert, rigid, and mindless -- a deterministic machine that Newton conceived of. The indigenous thinking runs parallel to the anthropological hallmarks that humans are in fact part of nature rather than apart from it. In fact, the biblical people (e.g., psalmists) are one in their deep respect of nature.

In contrast, the old philosophy dominated by dualism and later by scientism of the Enlightenment period looked to the world of Nature as something to conquer, to dominate. It lost sight of the creation stories and focused exclusively on human history, on the Fall and the Redemption. The traditional Christian thinking takes the idea of liberation or redemption as one of rejecting the world and concentrating on saving souls for the world beyond.

New Holism. Closely related to the new naturalism is new holism. This is the realization of the interconnectedness of everything. Included in this is the evolutionary concept which emphasizes the idea of 'becoming.' This argues strongly against the deeply held distinction between being and non-being. The Newtonian concept of the world as matter in motion, a complex of forces exerted on objects, the idea of leverage and weight -- all these connected with the early period of industrial era — ought to give way to the idea of process.

Processes and systems imply, among other things, a recognition that no part is meaningful outside of the whole. No part can be defined and understood save in relation to the whole. There is no such thing as closed or isolated systems

— none in nature, none in culture, none in societies. On the contrary, the empirical world exists in mind-body-society-nature totality. More importantly, this organic whole is determined not from the outside but from within.

New Immanentism. The organic whole presupposes an interior principle of order and becoming. Eastern philosophies and indigenous thought stresses this immanence in what Christians call pantheism. For the Judeo-Christian tradition, God is primarily 'up there,' or 'out there.' This can be traced to the fact that biblical people were living in inhospitable environments in the Middle East. So that both the pastoralist (e.g. Abraham, Lot, etc.) and the settlers felt the need to separate the Divine from the human and the natural world (McDonagh, 1991). This is in direct contrast to the fertility cults which is similar to indigenous tribal religion. Here the deity reveals itself in the rhythm of the natural world, especially in the mystery of fertility.

Christian thought is further truncated by the legacies of the Enlightenment era dominated by physicists who see the deity as the cosmic watchmaker of the universe where everything is set and done.

Biological anthropology, however, points to the fact that nature works in another way. Life is anti-entopic. The factory that makes the parts of the flower is inside, and is not a factory but a development. The creative principle is not external (Platt, 1966 in Ferkiss, 1969).

These new modes of anthropological thinking are offered to provide the necessary basis for the outlook that must come to permeate human society if humans are to survive the existential revolution and the destructive effects that come underway.

Modern humans must so internalize these ideas and make them part of their instinctive world view in order to inform our personal, societal, and cultural life. This, in turn, will make us realize that our aim is not to conquer nature but to live in harmony with it.

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