

Bio-Culture

Introduction

This section goes beyond the boundaries of biology as natural science, for it invokes the artistic perception of bios. Apart from being an object of scientific research, bios is also an inspiring world closely related to the inner self. It is a unique sense of joy to contemplate living things: the growing trees, the singing birds, the formerly invisible microbes dancing under a microscope. This miraculous beauty of life at all its levels is the deepest reason behind the new attitude of humans towards it, a reverence for life. The importance of the bio-environment as the core concept of a new culture or "the foundation for the furthering of bio-cultural models",¹⁻³ has been highlighted in the materials of the I.U.B.E.

In this spirit, the new bio-culture may expand the culture which already exists. Bio-culture does not only concentrate on humans, but extends its vision to all living beings on Earth, it bows in awe before each of the uncounted forms of bios. Leibnitz once remarked that life is infinitely complex on all its levels: a single fish is as complex a structure as the whole sea, a single fruit-tree is no less complex than the whole garden.

Meaning of Culture from a Biopolitical Perspective

To clarify the sense of the term bio-culture, one may ask what the word culture in general means. The definitions for culture that have been suggested in the last few centuries are numerous, each philosopher, historian, or sociologist preferring his own variant. Most scholars would agree that culture is a term which embraces the multifaceted activities, beliefs, concepts, values, and creations of society. It is not uncommon to identify culture with society as a whole. Spengler contrasted culture with civilization. Civilization may define purely technological, material progress as well as spatial (in particular, military) expansion of a nation. Culture, on the other hand, was based on spiritual values as promoted through religion, science and the arts. Toynbee described such preferential spiritual rather than material advancement of human society as the etherealization of culture.

The term culture is also used more specifically to define all the material and spiritual creations produced by society or its role during a certain era. In these terms, the pyramids belong to the culture of Ancient Egypt. On a smaller scale culture is used to denote the quality of a personality, both mental and physical, for example, "this person is of considerable culture."

Therefore the sense of bio-culture can be expected to be multifaceted. The following dimensions of bio-culture are of primary importance:

- creation of a new culture in the widest sense, a culture based on bios values. The people of future eras will be justified in calling the 21st century the bio-cultural era. The diverse character of culture is the reason why all the other dimensions of biopolitics bio-architecture, bio-athletics, bioethics enter into the concept of bio-culture;
- adoption of bios values, especially in the political arena, such as safeguarding and fostering the bio-environment will contribute to "producing and propagating understanding and encouraging co-operation", thus "creating an atmosphere favorable for peace."⁴ In this respect, bio-culture provides the foundations for bio-diplomacy;^{3,5}
- appreciation of the importance of all forms of life, understanding of the interrelationship between bio-environment and humanity, and perception of bios in artistic terms are the characteristic features of bio-culture;
- modification of the educational system in conformity with the bios concepts and values. It is imperative that a bio-sensitive curriculum be developed. In this manner, the schools involved will foster "a new culture sensitive to the bio-environment and its intrinsic properties."⁶ Alternatively, environmental studies could be incorporated into the study of natural and social sciences, architecture, business and others;
- adoption of bio-cultural views on a personal level. A person may be said to be of considerable bio-culture, or bio-cultured when adopting the bios values and using them in both professional and everyday life;
- adaptation in business and economy. Environmental concepts pertaining to business and economy have a personal dimension. Sustainable development⁶ can be considered a frame of mind structured by the ideas of a bio-cultured person.

Bio-Aesthetics

Bio-aesthetics plays an important role in the development of bio-culture. The new type of culture discussed here implicates bio-ethical values. A person brought up with an understanding of bios, and in the spirit of bio-culture, will regard clean technology and maintenance of the diverse bio-environment as something natural, as part of daily life. The idea that "nature is one and indivisible"⁷ will be common knowledge, and the guiding moral principle to this bio-cultivated personality. Throughout the centuries, art has reflected the study of nature and, in this respect, bio-art is nothing new. Yet, the recent opening of the microcosmos may provide unlimited sources of inspiration for artistic expression

in the future, for artists with a better understanding of bio-molecular structures may provide new dimensions of artistic expression.¹

Architecture, painting, sculpture and photography, literature may be greatly enriched by the expanded understanding of the behaviour of animals and plants. The aesthetic appeal of bios, can be seen in the symmetric patterns of physical structure. For example, animals having radial symmetry like starfish, the beautiful images of marine squid, octopus and coral have entered into the decor of Minoan frescoes, paintings, and vases. More specific examples of bios inspired design are covered in the bio- architecture section of this syllabus.

Bio-Literature

Literature may serve as the best pathway to propagate understanding and induce inspiration for the appreciation and preservation of bios. Literature may be a very powerful weapon for the defense of bios in the next millennium, since, in several cases in history, the pen proved to be "mightier than the sword".⁸ All literature deals with bios, but a new awareness may be required to reveal the relationship between humans, nature and all forms of bios.⁹ An illustrative example from Fritjof Capra's *The Tao of Physics*: "I saw cascades of energy coming down from outer space, in which particles were created and destroyed in rhythmic pulses; I saw the atoms of the elements and those of my body participating in this cosmic dance of energy; I felt its rhythm and I heard its sound..."¹⁰

Bio-literature can have yet another meaning: literature which covers bios-related issues, renders the artistic perception of bio-environment, and enhances bio-cultural values.

Bio-Culture and Creativity

The following ideas concerning bio-culture could be of interest for people involved with cultural activities such as architects, writers, playwrights, painters, sculptors, designers and musicians. However, none of the ideas below is to curtail the freedom of their creativity:

- to pay tribute to the paramount importance of all the forms of terrestrial life for one's existence on Earth. For the inspiration and creativity and to sing the praise of bios in works of art in whatever form;¹¹
- to use patterns found in living things to design clothing, draw pictures, build houses, erect statues, design sophisticated machines, electronic devices, or spaceships, as these patterns will be both of technical interest and artistic importance;
- to introduce elements of bio-culture in the local, regional and global design of future human settlements as well as the improvement of those already in existence, to create favorable conditions for all bios (the universal garden, Ecumenokepos), not merely for humans (universal city, Ecumenopolis);¹²
- when dealing with children, to help instruct them on the subjects related to bios by creating artistic images of bios comprehensible to a child, and making its significance clear;
- to demonstrate in works of art how important it is to have contact with living things and all the ways of communicating with bios are for the development of the human soul and society.^{1,2,13,14}

The interrelations between human culture and the bio-environment are becoming increasingly important in our time. "The environment is fashioned by the culture, which in its turn is moulded by the environment." Bio-culture represents the conscious attitude of humanity towards this interdependence. In all its different facets, it reflects the spirit of bios as the powerful uniting factor in the future co- evolution of humanity and bio-environment.¹⁵

Objectives:

- to make available to the people around the world the image of bios and the new ethical, cultural and societal values implicit in bio-education;
- to encourage people to draw from the inspiring cultural value of bios in order to satisfy new artistic aspirations and demands;
- to convince people of the intrinsic unity of all living things including man, so that doing good to the bio-environment should be part of our culture and everyday behaviour.

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