

Bio-History

Introduction

The starting point for bio-history on this planet is the origin of bios (life). Bio-history retraces the historical development of both the biosphere and humankind. Human's emergence on earth is envisaged as the outcome of biological evolution. Humanity possesses a number of distinctive features among which S. Boyden emphasizes the "aptitude for culture." Boyden has coined the term bio-history and introduced a curriculum on this subject into the Australian educational system.¹⁻³

Under the influence of the developing human culture, the environment- and in particular, bios, have been drastically changed. These changes have given rise to a new milieu to which humanity itself, who has caused these changes, is not adapted. However, in order to survive and to protect bios, mankind must now find a way not only to adjust to the culture-induced changes in the bio-environment, but also to compensate for the deleterious effects of humanity's activities on bios. As emphasized in the publications of the I.U.B.E., "maintaining and promoting bios (life) has, in general, become the most complex and urgent task facing humanity." ⁴ In this spirit, bio-history is primarily concerned with the following problems:

Bio-Environment-Humankind Interactions in History

A major direction of bio-historical research concerns the eras of history, interactions between the biosphere and mankind in different historical eras.

These can be classified on the basis of the interrelations between mankind and biosphere. S. Boyden distinguishes:

- the hunter-gatherer phase;
- the early farming phase;
- the urbanization phase;
- the modern phase.

These eras differ with respect to human activities and their effects on bios, to the mentality of the people and to their attitude towards bios. The principal types of environmental consciousness can be distinguished by their focus on:

- practical action (the pre-classical China);
- the heroic and mythological vision (Greek myths);
- philosophical interpretation of animal rights (Europe of the early New Times);
- integrated conception of the bio-environment (the oncoming vision of bios). ⁵

In the bio-historical context, the modern phase of bio-history is considered. It is characterized by highly developed science, technology, and culture, but also by environmental problems and issues. Environmental consciousness is closely linked to the character of the ideas dominating the mentality of the people in a given era. It is of interest in this context that great contributions to zoology and botany were made in this era, especially by Aristotle and Theophrastes;

Biological Influences on Man and Society

As part of bios, man is characterized by needs which involve his biological nature. These include the vital needs, like the need for nutrition and water. However, some of the subtlest needs, e.g. the need for friendship, company, love also have a biological background. ^{6,7} The interdependence between the bodily and spiritual development of man must be taken into account if we strive for the improvement of physical performance or intellectual creativity: ^{4,8} "Healthy mind in healthy body", as the classic Greek philosophers put it.

Bio-history is concerned with the physical, biological and bio-sociological factors influencing the operation of the human body and development of the personality e.g. natural selection, health and disease, non-verbal communication, laws governing group and population structure (rank hierarchy, xenophobia, territorial behaviour, etc.), instinctive behavioural patterns implicit in human behaviour, etc. ^{1-3,9,10}

Bio-History and Educational Reform

In order to attain the goals considered by the B.I.O., global educational and research program on biopolitics providing a new millennium vision based on respect for bios, and, in particular, a curriculum on bio-history should be introduced worldwide. Such a curriculum should highlight the following points:

- the general bio-historical perspectives, the dependence of the present stage of development of both humanity and bio-environment on their long interwoven history;
- the essential facts and principles relevant to the present-day relations between man and bio- environment, to the ways of improvement of these relations, to a harmonious co-existence and co- evolution of bios and humanity as its component part;
- particular themes of local/topical interest, e.g. health in cities, local conservation strategies or the greenhouse effect. 3

Thus, bio-history can be seen as a new promising research direction of interest both to the scientific community and to the lay people. As part of the biopolitical education, the main ideas of bio- history should become available to multitudes of people throughout the Earth.

Objectives:

- to sensitize people to the close linkage between biological evolution and humanity history, to extend their historical vision to the eras preceding the development of human civilization;
- to familiarize them with the basic patterns in bio-history so that today's world can be seen in a bio- historical perspective;
- to enable the people to benefit from the knowledge of bio-history so as to face the challenges of a new era, to help them establish harmonious relations with the bio-environment in order to overcome the serious environmental problems of our present time.

References

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