

WHAT IS AND TO WHAT END DO WE STUDY BIOCOSMOLOGY?

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Coherent theories of science are superior to aggregates of pieces of knowledge

Friedrich Schiller, in his 1789 inaugural lecture at the University of Jena asks ‘What is and to what end do we study universal history?’ He distinguishes between the bread-and-butter scholar and the philosophical brain, the first being a ‘slave soul in the empire of freedom’ symbolizing particularity, the latter recognizing the internal connection of all knowledge: ‘What the bread-and-butter scholar separates, the philosophical brain connects. Schiller discusses various specialized disciplines in the humanities of his time. If he would have been aware of the myriads of disciplines and sub-specializations in modern biology, medicine, engineering, physics, chemistry, electronics, software, and geography, his critical judgment would have been even harsher. Of course, we owe our modern and comfortable ways of life to highly specialized knowledge and its application; but similar to bread-and-butter historians these modern scientific specialties do not provide for our self-understanding and for making sense of it all; they give nothing but ‘an aggregate of pieces’ as Schiller would say. Truly philosophical world history is encompassing ‘because she encourages people to identify with the entire past and to run ahead with their consequences into the future’. [1989] Modern natural sciences, cosmology and biology the most encompassing, need to do the same.

Modern sciences need balance and review by modern ethics

It was Pastor Fritz Jahr in Halle who in 1927 coined and defined bio-ethics as a new academic discipline and culture-and attitude forming moral tool as a counterpart to the newly developed science of bio-psychology, i.e. the science of neural activity and interaction similar in humans, animals and plants. Criticizing Kant’s narrow anthropological Categorical Imperative, requiring to treat fellow humans as ends in themselves not as means, he formulated the modern Bioethical Imperative ‘ In sum, the guidance of our moral actions has to be the Bio-Ethical Imperative: Respect every living being, including animals, as an end in itself and treat it, if possible as such. And if somebody does not want to accept the absolute validity of such a rule in as far as animals and plants are concerned, he should – in recognition of the moral obligation towards human society in general – nevertheless follow it.’ [1928: 102] Jahr envisions as well a new discipline and attitudinal culture for management in modern workplace and business dominated by micro- and macro-economics: ‘Our entire life and activities in politics, business, in the office and the in laboratory, in the workshop, in the farm fields are ... not based on love in the first place, but many times on competition with other competitors. Quite often we are not cognizant of this fight as long as we proceed without hate and in a fair, legal and accepted manner.

Similarly, as we cannot avoid the fight with our fellow humans, we cannot avoid the struggle for life with other living beings. Nevertheless, we will not want to lose the ideal of responsibility as a guiding point, neither for the first nor for the latter'. [1928:102]

Cultural geography as guidance for science and culture

It was close to another century earlier that Ernst Kapp, a teacher and Hegelian scholar in Westphalia, developed another modern science, bridging the gap between classical geography and human interaction with environment called Cultural Geography, following the terminology of his geography teacher Carl Ritter. Philosophical geoscience (Erdkunde) as a necessary new philosophy of science and a useful analytical tool: 'Geoscience alike history can be dealt with in a philosophical manner. Philosophy from *Vico* to *Hegel* has produced some remarkable books in philosophy of history. They have earned a special prize for that, as they themselves have been recognized as historical powers, a praise which could have even been higher if they had given more attention to the *geographical existence of the nations*. This deficit is their weakness... *Geography* is ingrained into every *place* of his history, into every *action* of human will in his special spatial limits towards its potential realization... Therefore *philosophical geoscience* is the *indispensable condition of all true history science*. History in its highest form is philosophy of history or politics in a broader sense. Philosophy of earth science therefore can be defined as a *preparatory school for politics* (Vorschule der Politik). All roots of political formation are *in man*; they are developed by man; the process of this development is *history*. Geography, however, as with and under history developing, is *anthropological*. As such, she is naturally very close to man, because the destination of man is the liberation of his spirit by overcoming nature. We call this process of emancipation history, and via this process the *education* of humankind (Erziehung der Menschheit) completes itself as well. The anthropological aspect of philosophical geoscience in this sense, therefore, relates to the task of self-recognition of humankind – via the conscience (Bewusstsein) embodied in history and always renewing itself in it. From a philosophical point of view, geoscience, therefore, is political science as well.' [1845: VIff] If Pastor Jahr would have known about Kapp's concept and ethics of cultural geosciences and the humanist vision of transfiguration of nature, he most likely would have made cultural geosciences one of the other fields of modern culturally and morally sensitive applied ethics such as social ethics, medical ethics, animal ethics, plant ethics, management ethics, balancing modern hard sciences.

Bioethics – Biocosmology

From Kapp's and Jahr's model of a modern philosophical theory and ethics, encompassing special fields of modern science, it is only a small way to Khroutski's definition and application of biocosmology. His critique of modern cosmology reads similar to the critique of Schiller, Kapp and Jahr towards bread-and-butter experts in modern sciences: 'restore the original notion of 'cosmology'... a study of the

Universe in its wholeness (including life processes)... a definite rational resolution of the issue about active (driving) forces in the cosmic whole, which foremost cause wholesome evolutionary processes in relation to the conscious subjects, including ontogenesis of each person and ascending cycles-stages of the evolutionary process of social and ecological development... a definition of fundamental (universal) laws in respect to both physical (non-organistic) phenomena and processes and equally, - in relation to life (organistic) phenomena and processes, and, herein, - universally referring to all spheres of life (biological, ecological, anthropological, psychological, personalist, social, culturological, etc).' [2010: 54] Our most recent understandings of global climate change remind us that the globe itself is a living being with its own seasons, long-term and short-term chances, developments and modifications, most of which are totally out of our control, only some of which, such as industrial pollution and environmental destruction, can be mitigated to a certain point in order to allow for sustained human development and continued human culture and cultivation. Thus, we must add biocosmological ethics as a discipline, a principle, and a virtue to Jahr's original broad concept of Bioethics. The biocosmological ethical version of a content-rich Moral Imperative in the Kantian tradition would read: *'Respect mother earth with all her forms of life, whether natural or man-made, basically as goals in themselves and treat them, if possible, as such'*.

Universal bio-ethics, a call to action

According to Schiller, the educational result of studying universal history is 'to intertwine the past with the present; the more we will recognize cause and result as means and goal... We thus take the harmony out of ourselves and plant it into the order of things, i.e. we bring a reasonable goal into the road of history, i.e. a teleological principle into world history. With this we review it again and prove it against all phenomena which appear in this grandiose theatre.' [1789] From the development, study and review of bioethics, of which biocosmology is one of its indispensable part, we can say the same. At the end of his 1789 lecture Friedrich Schiller summarized his reflection by challenging his audience to become active: 'Whatever different positions may be waiting for you in civil society – everyone of you can contribute something! Every service opens a trail towards immortality, towards true immortality where action lives and goes on even when the name of its actor is left behind.' The same encouragement will and must come from introducing Bioethics, including Biocosmological Ethics, into everyday culture, science policy and politics, - for the benefit of living civil societies and for the benefit of all living beings on and including the living cosmos.

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