

Trumpeter (1992)

ISSN: 0832-6193

INTRODUCTORY BIOLOGY AND 'LIFE APPRECI-
ATION' COURSES

Arne Naess

University of Oslo

About the Author: Arne Naess is Professor Emeritus of Philosophy, University of Oslo, Norway, and is now with the Council for Environmental Studies there. He is the author of many books and articles and travels and lectures widely. He coined the term "ecosophy" which appears in the subtitle of this journal.

Biology is the fifth and the second last of the 6 sciences covering all that is, according to the influential philosopher of science, Auguste Comte. He lists them in the order of complexity: mathematics, astronomy, physics, chemistry, biology and sociology. Biology was conceived as a science of organisms, and a main problem for Comte was whether, like chemistry, its 'laws' could be derived from those of physics. In any case, Comte had the influential idea that his classification of science shows that there is no place for metaphysics, and especially no place for a study or understanding of value (other than the purely instrumental).

Today biology is more often defined in terms of the study of living beings than of the study of organisms, but the courses in biology, and the range of biology as conceived as part of an encyclopedia, is still centered around the anatomy and physiology of kinds of organisms with a sprinkling of evolutionary terms. These areas are often thought to furnish the hard core and conceptual basis of the life sciences, the science of living beings. The study of ecology, and the study of the various contemporary conceptions of life and the conditions of life on Earth are not conceived to be basic studies of life. There is much that can be said for such a conception of what is the most basic. But it should be remembered that the conception is itself derived from valuation, not from facts alone.

When students are introduced to biology as *the* study of living beings or of *the* organisms, they are today often deeply dissatisfied with the narrowness of perspective of most courses in most countries. When they complain, the answers they get tend of be unsatisfactory. If teachers say that basics must be learned first, the students may justly feel that most of what they learn in the introductory courses are not 'basics'. What factual basis have conclusions about basicness? Which valuations are tacitly assumed to be valid or at least uncontroversial?

Until recently chemistry was primarily a study of chemicals. Now it astonishes old chemists how few chemicals are studied. Students must know a lot about chemicals, as astronomers about stars, but introductory courses do not take the study of a set of chemicals or of stars as 'basic'. An *analogous* change of biology may be warranted today — but only analogous, not similar.

Considering the crisis of life conditions, an extinction rate of 100-200 species a day on Earth, and the influx of students who take biology courses being motivated by their awareness (however fragmentary or misguided) of a crisis,

basic courses must relate to this phenomenon. Factual knowledge must get priority in part in relation to the motivation of the student. This is mostly not realized, and we have here one of the roots of dissatisfaction.

Earlier, the term 'analogous' and not 'similar' was used because the richness and diversity of species of chemical compositions have only a remote relation to that of living beings. As experienced by a now old-fashioned 'stuff-chemist' chemicals certainly have or had a sort of life-quality, at least a sort of identity and independent (fascinating) character similar to that of species of animals or plants to a naturalist. So there have been and still are chemist-naturalists.

The reality of chemicals for chemist-naturalists is in part a realm of chemicals as gestalts. [See A. Naess on the 'gestalt-ontology view', *The Trumpeter*, Fall 1989]. The specimens of species, genera and families of living organisms make up a reality with intrinsic value, subjects of care for their own sake, subjects of respect, subjects of identification in a pronounced way mostly absent in the case of chemicals.

There is, however, a strong reason for not having to *learn* much about the individual species genera, families, and so on, but rather to understand, especially in the sense of Spinoza's *amor intellectualis*, and with comprehensive unity with the subject. This implies excursions of very special kinds, living at least for some time in 'mixed communities'. It implies the ability to verbalize experiences so that the student can communicate to others what 'nature tells them'. Through proper selection of places the student gets in touch with living beings of highly different genera, families and so on. It will be the responsibility of the teacher to estimate what the student has gained of experience, ability to articulate, and proper conception of the limitedness of his or her knowledge.

Citation Format

Naess, Arne (1992) INTRODUCTORY BIOLOGY AND 'LIFE APPRECIATION' COURSES *Trumpeter*: 9, 3. <http://www.icaap.org/iuicode?6.9.3.9>

Document generated from IXML by ICAAP conversion macros.
See the [ICAAP](#) web site or [software repository](#) for details