
Submitted Summaries

Filozofia Nauki 9/2, 177-179

2001

Artykuł został zdigitalizowany i opracowany do udostępnienia w internecie przez **Muzeum Historii Polski** w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

Submitted Summaries

Kazimierz Jodkowski

In search of a hard core of evolutionism

The author of the paper distinguishes so-called «soft» theories, which adapt to many empirical situations, even mutually contradictory ones, and «hard» theories, which exclude many imaginable empirical situations (*i.e.* results of observations and/or experiments). Every theory is soft to some degree, due to possible modifications of the protective belt of auxiliary hypotheses and redefinition of scientific terms. According to Popper's or Lakatos' criteria, absolutely «soft» theory is unfalsifiable and therefore unscientific. The «harder» is a given theory, the better. The author presents the results of his search for «hard» elements of evolutionary theory and concludes that it seems that this theory has no empirical hard core.

Maciej Giertych

The role of information in the nature — controversy about the theory of evolution

Biological reality does not consist of chemistry and physics of organism alone. It also includes their information content. This information regulates developmental and reproductive processes. Its quantity is finite. We observe mixing of information (mating patterns, reduction division, hybridisation, genetic engineering), its loss (species extinction, reduction of genetic diversity in domestication, isolation, inbreeding) and increase of useless or injurious information (duplications, neutral and harmful mutations, genetic load). On the other hand we do not observe new useful biological information arising (positive mutations). New useful information does not appear by accident. Nature and man made selections reduce the information resources, mutations debilitate them, population reduction and its isolation cause accidental losses of information. Acquired resistance to antibiotics or herbicides, which is

often presented as an example of increase of information, is only a defence mechanism against loss of functionality of an organism or population (e.g. by immunological adaptation). Such mechanisms belong to the already existing information content. No new organs or functions are produced.

Until natural sciences come up with an indication of the mode by which useful information resources can be increased in nature, by which new functions or organs are produced, the theory of evolution will remain a hypothesis without substantiation in facts.

Włodzimierz Ługowski

On two traps of scientific creationism

The author attempts to answer the question, how it is possible that many scholars — including those representing prestigious universities and research institutes — are ready to consider creationists critique of the origin- of-life theories as „valuable”, „scientifically useful”, „cogent”, and „clarifying our thinking”. The answer seems to be simple: the same *metascientific* assumptions, which constitute a basis of anti-evolutionistic argumentation, still live in the philosophical consciousness (or subconsciousness) of a lot of scientists. Among these assumptions is he thesis that order does not arise from disorder and the principle of the uniformity of nature.

Marek Pepliński

Is rational disbelief in evolution possible? Analysis of Alvin Plantinga's arguments

Alvin Plantinga claims that Christian believer can rationally disbelieve in some elements of the theory of evolution: the Common Ancestry Thesis; Darwinism, taken as explanation of origin of life by the mechanism of natural selection operating on random genetic mutation, and Naturalistic Origins Thesis — the view that present life itself developed from non-living matter without special activity of God. After the justification of the possibility of conflicts between faith and science, Plantinga's arguments are examined and assessed as successful, with a few exceptions. The main thesis of this paper is that Plantinga is right claiming that rational disbelieving in evolution is possible, but his arguments are not enough to justify special creationism as theistic knowledge, supposing that knowledge warrants the truth.

Jolanta Kosztyeń, Piotr Lenartowicz SJ

Integration of biological dynamic and 'phylogenetic trees' of living beeing

Since Darwin, a genetic continuity of morphological and behavioral traits between all living beings has been taken for granted. This paper describes eight irreducible classes of descriptive traits on the basis of the presence or absence of (a) repetitivity, (b) correlation with natural environment properties and (c) inner integration. It is argued that some of these classes should neither be used in taxonomy nor in phylogenetic reconstructions. The remaining classes imply an inner dynamic indivisi-

bility on the one hand, and an evident relation to the concept of the reaction norm on the other. These implications, in turn, may lead to the recognition of much broader „natural species” units which embrace forms usually grouped within a genus or family. Morphological and behavioral gaps between such „natural species” have to be considered in relation to the rather mysterious developmental, integrative and adaptive potential of a particular natural species. Paleontological data seem to confirm the existence of such gaps. This introduces a serious objection to the theory of common descent and to the cognitive utility of the macro- and mega-evolutionary „phylogenetic trees.”

Adam Grobler

The problem of basic statements as a test in the internalism—externalism issue

The relevance of the Popperian heritage to the internalism—externalism issue is explored. First, the nature of the controversy between Popper and his disciples, Watkins and Zahar, about basic statements is discussed. Popper’s resistance to Watkins’ and Zahar’s elaborations is suggested to be motivated by his implicit anti-internalist attitude that is misnamed by him as anti-psychologism. Next, instead of a conventionalist, an externalist reading of Popper’s mention about the role of a „scientific jury” in accepting basic statements is offered. It is doubtful, however, whether Popper can be considered an externalist, for he rejects the concept of justified belief altogether. Still, it is suggested that future elaboration of his ideas may help to explain away the circularity apparent in Goldman’s reliabilism and arrive at a more tenable form of externalism.

Maciej Witek

Deflationism and normative element

The author offers a critical analysis of so called deflationary conception of truth. According to the conception in question an adequate theory of truth contains nothing more than instances of a schema:

„p” is true iff p.

In short, truth is a disquotation.

After giving a brief presentation of main deflationary ideas, the author argues that deflationism conflicts with normative epistemology. In other words, being a form of naturalism it leads to elimination of so called normative element from the philosophy of science. For example deflationary conception of truth is not able to account for constitutive connections between normative ideas of truth and reliability.