
Abstracts

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Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

Abstracts

Jerzy Bobryk, Normal Science, Global Science and the Institutional Facts as a Goal of Science

The paper describes the theory of mirror neurons system and reminds selected empirical researches made in its context. Author evaluates the theory from the theoretical and methodological point of view. The background of undertaken analysis and evaluation is Lakatos' and Kuhn's methodology and philosophy of science.

Keywords: illocution, mirror neurons system, methodology, philosophy of science, scientific revolutions, social sciences

Krzysztof Czerniawski, Model-Theoretic Argument Thirty Years Later

The paper aims at describing the discussion about the model-theoretic argument of Hilary Putnam in the past thirty years. First of all it presents the view of Timothy Bays, who through scrupulous examination of the formal side of the argument demonstrates that in fact it has very little in common with the model-theory. It is rather a simple and purely philosophical argument, which isn't more reliable and conclusive than any other argument in philosophy. Putnam tries to block the answer of followers of the causal theory of reference by insisting that it is „just more theory”, which could be erased by argument like any other language structure. In response metaphysical realists, like David Lewis and James Van Cleve, claim that „it is not causal language that fixes reference; it is causation itself”. David Leech Anderson agrees with metaphysical realists that in principle causal theory could fix the reference, but in his opinion we do not have reliable and substantive theory of that kind, and it even doesn't seem probable that we will have such a theory in future. In conclusion, I agree with Putnam that the metaphysical realist says that „we-know-not-what fixes the reference relation we-know-not-how”, and he doesn't have any chance of avoid-

ing the demolition by the model-theoretic argument, because he still tries to separate sharply the realms of language and reality.

Keywords: Putnam, philosophy of language, realism, anti-realism, logic

Jakub Michalski, Wittgenstein *Tractatus*: An Issue of Identity

The main goal of the paper is to present Wittgenstein's standpoint towards the question of identity of simple things and identity sign.

The starting point of the paper is the presentation of the difficulties which Russell and Frege faced while analysing „*A* is *B*„ type propositions.

In the second part of the work the Wittgenstein's thesis that identity is not a relation is examined. The thesis, which is in opposition to Frege and Russell views, within the Wittgenstein's system, is a consequence of the ontological assumptions: atomic states of affairs (*sachverhalt*) are mutually independent; things are common to all possible worlds.

In the next section some difficulties concerning the identity conditions on the base of Wittgenstein's ontology, is discussed. Wittgenstein's logical space comprises of such possible worlds that one object is able to have, within these worlds, exactly the same properties (Thesis 2.027), therefore criterion that objects are identical when they have the same properties does not apply. Furthermore within Wittgenstein's space an object is able to change all its external properties, which means that the identity of an object cannot be determined by its external properties. However, since forms of things are 'collective', the internal properties do not determine the identity, as well. What does then?

Wittgenstein's argumentation supporting thesis that identity formulas are not propositions will be analysed next. The main point of the argumentation is that there is impossible to understand two names without knowing that they refer to the same thing.

The last section of the article presents an idea to translate formulas including identity sign to formulas which do not comprise this sign but maintain the meaning of the 'originals', which is contained in *Tractatus*.

Keywords: identity, simple things, Wittgenstein

Krystyna Misiuna, Faces of Inconsistency

The concept of inconsistency has become recently the subject of many studies focused on the principle *ex contradictione sequitur quodlibet* which is a hallmark of the classical inconsistency. Stanisław Jaśkowski was the first who took a non-classical standpoint toward this principle building a system of propositional logic which rejects this classical principle. Rejecting it implies important consequences for the concept of classical negation, and poses the question in which properties the operation of negation should be endowed. The intention of this article is to define the concept of inconsistency as well as the concept of negation in a way satisfying the main intuitions natural language users connect with the two notions occurring in

propositions containing vague concepts. The vagueness of natural language discourse leads to the phenomenon of the seeming contradiction characteristic of natural language. A non-standard consequence relation for such a language has been defined in terms of preferential semantics making use of the concept of most classical model. This non-standard consequence relation is applied to the ethical discourse. The concepts introduced in this article have been used to an interpretation of the contradictories of Plato's *Parmenides*, as well as to the rejection of dialetheism.

Keywords: negation, classical contradiction, principle of contradiction, Belnap's logic, non-standard consequence relation, dialetheism

Piotr Wilczek, A New Postulate of Set Theory – The Leibniz–Mycielski Axiom

In this article we will present the Leibniz–Mycielski axiom (LM) of set theory (ZF) introduced several years ago by Jan Mycielski as an additional axiom of set theory. This new postulate formalizes the so-called Leibniz Law (LL) which states that there are no two distinct indiscernible objects. From the Ehrenfeucht–Mostowski theorem it follows that every theory which has an infinite model has a model with indiscernibles. The new LM axiom states that there are infinite models without indiscernibles. These models are called Leibnizian models of set theory. We will show that this additional axiom is equivalent to some choice principles within the axiomatic set theory. We will also indicate that this axiom is derivable from the axiom which states that all sets are ordinal definable ($V=OD$) within ZF. Finally, we will explain why the process of language skolemization implies the existence of indiscernibles. In our considerations we will follow the ontological and epistemological paradigm of investigations.

Keywords: the Leibniz law, identity, indiscernibility, new axioms of set theory

Jacek Wolski, Measure of Amount of Information and Its Meaning

There are five different conceptions of information which have been created in last sixty years. Each of them diversely define notion of information. The aim of this article is to prove that these five conceptions represents two separate trends. Every introduced conception of information is qualified either to quantitative trend, which is supported on rating of amount of information, or to semantic trend, which describe meaning of information. These trends are exclusive.

Keywords: information, mathematical theory of information, inductive logic, algorithmic theory of information, standard definition of information, epistemic logic

Pawel Garbacz, Problem of Artefacts's Existence. A Discussion Note

In this paper I discuss the arguments against the existence of artefacts, which were propounded by Mariusz Grygianiec in his book *Identyczność i trwanie*. I show that all of these arguments are inconclusive or are in the need of further elaboration.

Therefore, I conclude that the metaphysical thesis to the effect that artefacts do not exist remains unsupported.

Keywords: artefact, ontology, existence, R. Chisholm, eliminativism

Mariusz Grygianiec, Eliminativism and Artefacts

The paper provides an answer to Paweł Garbacz's article *Problem of Artefact's Existence*, which is a critique of eliminativistic views presented in my book *Identyczność i trwanie. Studium ontologiczne (Identity and Persistence. An Ontological Study)*. In the text crucial objections formulated by Garbacz are reconstructed and carefully discussed.

Keywords: eliminativism, artefacts, Garbacz, natural kinds, causal powers

Wojciech P. Grygiel, The Superstring Theory and Lee Smolin's Troubles with Physics

Contemporary physics is in a great need of a unified theoretical framework allowing for a comprehensive physical description of particles and interactions. One of the leading candidates for such a framework, the *superstring theory*, has recently provoked immense critics due to the lack of its experimental verification (L. Smolin, R. Penrose). The survey of the specificity of the unification mechanisms that are operative within the superstring theory shows that, in comparison with such a successful paradigm as that of the general theory of relativity, the unification model of the theory does not follow the strict relation between the formalism and a unifying physical idea. The critical analysis of the superstring theory, presented by Lee Smolin in his book *The Trouble with Physics*, offers a detailed re-evaluation of theory's physical foundations but remains insensitive to issues of methodological, ontological and epistemological import. In particular, Smolin seems to be aware of the lack of the background independence as well as the need to compactify extra space-time dimensions that are hoped to be alleviated in the future M-theory. He treats purely mathematical criteria such as that of *renormalizability* on an equal footing with the physical interpretation of the theory. Such a methodological disarray leads to Smolin's biased estimate of the true drawbacks of the superstring theory.

Keywords: Lee Smolin, string theory, philosophy of physics