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# Abstracts

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Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

## **Abstracts**

### **Anna Brożek, Jacek Jadacki, Thought Experiments in Philosophy**

It is not surprising for us that thought experiments are so popular among philosophers and among readers of some philosophical journals.

As we showed in our paper — they are either would-be real experiments or stimulators of revealing convictions and opinions of people on which experiments are prosecuted. Besides the fact that thought experiments fulfill an illustrative and *a fortiori* persuasive function, they do not play any important theoretical role. They are simply exemplifications — usually inventive and funny ones — of some «pure» processes of reasoning. Their popularity has its source in the fact that since their childhood people like reading books with... illustrations. There would be nothing wrong with making use of such illustrations if texts in which they are described contained clearly expressed theses and transparently presented argumentation. Unfortunately — texts illustrated by thought experiments are lacking of such clarity and transparency.

This is probably the reason for the fact that texts containing thought experiments are so widely commented. It is a very known truth that the less clear and transparent the text is, the more interpretative comments it needs. And in comments, there appear — instead of clearly formulated theses and transparently presented argumentation — new thought experiments...

*Keywords:* metaphilosophy, thought experiments, physical thought experiments, diagnostic experiment, semantic thought experiment

### **Jakub Jonkisz, Concept of Consciousness in Cognitive Science and Philosophy of Mind — An Attempt at a Taxonomy**

The paper argues that dozens conceptions of consciousness encountered in cognitive neuroscience, the philosophy of mind, and other related fields (e.g. phenome-

nal, access consciousness; sensorimotor, perceptual, self-consciousness; normal, altered and impaired consciousness, visual, tactile, social, body, animal, machine consciousness) can all be understood as constituted with reference to four fundamental criteria i.e. epistemic (dealing with kinds of consciousness), semantic (concerned with orders of consciousness), physiological (reflecting states of consciousness) and pragmatic (types of consciousness).

It is not only hoped that the resulting four-fold taxonomy is exhaustive and clear enough to serve as a sound theoretical framework for further scientific investigations but also that it implies the unity of consciousness. If the latter consequence is true it would mean that all of the distinct varieties of consciousness ultimately refer to a single unified natural phenomenon, analyzed under four just mentioned aspects. Even if the statement of the unity can be questioned the proposed taxonomy is itself an important step towards a proper formulation of a general concept of consciousness accepted in all fields of research.

*Keywords:* kinds, orders, states, types of consciousness; subjective/objective consciousness; sensorimotor, perceptual/meta-perceptual, self-consciousness; normal, altered, impaired consciousness; visual, social, animal, machine consciousness

### **Adrian Nita, Leibniz on Subject and Individual Substance**

We will focus on the theory of complete concept in the philosophy of Leibniz. We will not emphasise the epistemological aspects, but rather will concentrate on the metaphysical implications of this theory. Some questions requiring an answer will be: are there two individual substances of the same kind? What is the nature of a substance that is only possible? What kind of notion has the unactualised possible? What is the nature of the relationship between individual substance and the complete notion? In order to answer these questions, we will present in the first part of the paper the concept of individual substance, in the second part, we will focus on the problem whether the possible objects have or have not a complete concept, and in the third part we will give some additional arguments to support our answer.

*Keywords:* early modern philosophy, Leibniz, substance, complete concept, individual substance

### **Adrian A. Ziółkowski, Problems with Defining the Notion of Law of Nature in Terms of Counterfactual Propositions**

The article is a critical commentary on explication of the notion of law of nature based on the concept of counterfactual proposition. The view in question was originally proposed in the 40's of past century by Roderick M. Chisholm and Nelson Goodman (further referred to as 'CG criterion') and has been popular among philosophers ever since.

The main thesis that I argue for is that jointly with the most crucial philosophical analyses of counterfactuals — including inferential semantics proposed by Chisholm and Goodman themselves and possible-world semantics introduced by David Lewis

— the aforementioned method of explaining laws of nature generates *circulus in definiendo*.

Firstly I focus on the main issues of providing an adequate philosophical account of laws of nature. One of those issues is a need of drawing a distinction between so-called accidental and non-accidental generalizations, which CG criterion is supposed to provide. In short, according to CG criterion, laws of nature are those and only those true generalizations which support the truth of analogous counterfactual propositions.

Then I move on to present Chisholm and Goodman's account of counterfactuals. According to their analysis the truth of a given counterfactual is equated with the existence of a deductive system that allows to infer the consequent of the counterfactual in question on the basis of the assumption of its antecedent. I discuss some technical (mainly logical) problems with their solutions. Then, I reveal that in order to make it work, the solution in question requires the use of the notion of law of nature and thus leads to circularity.

Finally, I consider whether GC criterion might be proposed jointly with the most popular truth-conditional semantics for counterfactuals introduced by D. Lewis without causing such problems as mentioned above. By pointing out the fact that similarity between possible worlds is crucial for Lewis' analysis of counterfactuals and that correspondence in respect of laws is the most important criterion of similarity between worlds I show that GC criterion leads to circularity in this case as well.

*Keywords:* laws of nature, counterfactuals, inferential semantics, possible-world semantics

### **Anna Lemańska, Remarks on Mathematical Platonism**

The mathematical Platonism is the most popular standpoint amongst mathematicians. The Platonism better than other conceptions explains the fact, that mathematicians discover some properties of the mathematical objects, which are independent of them and exceed the boundary of our intuition and experience. On the other hand Platonism generates some difficulties. In spite of this the Platonism is the idea worth the defence. In the paper I modify the traditional formulation of Platonism, which avoids some of the difficulties.

It seems, as if some mathematical notions have the same properties as concrete physical objects, for instance: number 5, number  $\pi$ , the minority relation between the natural numbers, the ring of integers. These notions determine the single mathematical objects, whereas concepts such as function, natural number, relation, ring, linear space, determine the whole classes of the objects with the same properties. Thus we can divide mathematical notions into two categories. The notions, which we can treat like the concrete objects, form one of these categories. In the second category there are notions which play the role of general notions from the colloquial language. The notions from the first class can be members of some set; they can also be combined together. The notions from the second group cannot become elements of any set.

These different ways of behaving of mathematical notions suggest that their existence is also different. The objects from the first category exist independently from mathematicians; the notions from the second group are the creations of human mind. Therefore I propose to keep Platonism regarding the objects from the first class and to accept conceptualism regarding mathematical objects from the second group.

*Keywords:* philosophy of mathematics, platonism

### **Jerzy Pogonowski, A Few Remarks about Mathematical Intuition**

This short note is a summary of the talk given at the Adam Mickiewicz University in Poznań during the conference on *Philosophy of Mathematics, III*, on October 17, 2011. We suggest to understand mathematical intuition as a collection of (verbalized) judgments constituting the core of the context of discovery in mathematics. Mathematical intuition is present not only in the axioms: it can be observed in mathematical research practice as well. A few examples of mathematical intuition *in action* are given. We discuss the dynamic character of mathematical intuition, trying to reveal the sources of the corresponding changes of intuitive views in mathematics. There are several such sources, e.g.: paradoxes, new research programs (for instance, the program of arithmetization of analysis), explicit definitions of concepts understood so far in an intuitive way, and — of course — the development of the mathematical knowledge itself. We devote special attention to the distinction between standard, exception, and pathology. Finally, we say a few words about conflicts of intuitions in mathematics.

*Keywords:* mathematical intuition

### **Krzysztof Wójtowicz, Structuralism versus Object Realism — A Genuine Argument?**

In the article, I discuss the differences between mathematical structuralism and object realism. I argue that they are partly only a matter of formulation and that some basic theses of both standpoints can be translated into the opponent's language.

I also indicate some problems of both these standpoints. From the point of view of mathematical structuralism, object realism has to face the problem of reference of mathematical terms. From the point of view of mathematical realism, mathematical structuralism relies on quite strong metaphysical assumptions. I also claim that structuralism also violates our intuitive understanding of some mathematical notions.

*Keywords:* structuralism, mathematical realism, ontological relativity

### **Patryk Pogoda, Thomas Aquinas Monotonically**

The paper is a critical reaction to Marcin Trepczyński article „Thomas Aquinas Non-Monotonically” (*Filozofia Nauki* 2/2011). It is shown that the author misunderstood the real forms of Thomas Aquinas reasoning. I present arguments which show

why these reasonings are monotonic by analyzing some of the examples which Trepczyński is using to justify the opposite thesis.

*Keywords:* nonmonotonic logic, Thomas Aquinas, reasoning

### **Marcin Trepczyński, The Question about Non-Monotonicity in Theology**

Does Thomas Aquinas use non-monotonical reasonings? In my recent paper *Thomas Aquinas Non-monotonically* I argued that he does. However Patryk Pogoda has opposed to my statement. In this paper I try to disarm his arguments. What is more this polemic became for me an occasion to develop some crucial problems concerning non-monotonicity. Before all while answering to some arguments of my opponent I had an opportunity to show that non-monotonical reasoning is a proper way of inferention in theology. The main causes of this fact are: the plurality of meanings in theology, the process of deeper and deeper penetrating the revelation and the fact that information studied in theology is given not by a human, but by God. These three causes create a specific situation for the theologian who cannot translate a revealed information which looks as it was metaphorical to some simple unequivocal sentences. In the starting point he does not know the status of this information and should first trust to God's word to became acquainted with it, so he has to accept it as it is and on this basis infer what he can. But if he (or another theologian) get some other premises he may dismiss the former correct inference — and this is exactly what we call non-monotonical reasoning.

*Keywords:* non-monotonic logics, reasoning, inference, theology, Thomas Aquinas

### **Zajęcki Maurycy, On (the Need of) Reception of Leszek Nowak's Negativistic Unitarian Metaphysics**

The aim of this review article is to discuss the perspectives of reception of metaphysical system proposed by Polish philosopher Leszek Nowak (1943-2009). In 2010 Krzysztof Kiedrowski published a book „Zarys negatywistycznej metafizyki unitarnej” [An Outline of Negativistic Unitarian Metaphysics]. The book was meant to be a handbook on the topic of Leszek Nowak's metaphysical system introduced in three volumes titled collectively *Byt i Myśl* [Being and Thought]. In this review article the idea of such „promoting” of the system is examined. The analyses lead to the conclusion that Leszek Nowak's system is almost completely neglected by Polish philosophers. The main difficult of Leszek Nowak's system lies in its method, which is a combination of two philosophical traditions: Hegelian dialectics and analytical philosophy. Such combination „repels” many readers, and makes the system „opaque”. After the lecture of Krzysztof Kiedrowski book one can see clearer the very idea of the system. It becomes obvious that there are two features which make the system unique in contemporary philosophy. Firstly, Leszek Nowak proposed a system which is consistently unitary, which means that fundamental metaphysical divisions (abstract — real, material — ideal, body — mind, etc.) can be interpreted as parts of a wholeness (attributive, negativistic universe of possible worlds and enigma). This

is a highly speculative idea. Its justification cannot be of empirical nature. The justification comes from its „usefulness”. Leszek Nowak used his system to paraphrase a large number of classical ideas of western and oriental philosophy. It is true that paraphrases lead to many unintuitive conclusions, which is not, by itself, a drawback. Unintuitive paraphrases allow us to understand better the fundamentals of classical philosophical traditions, and, secondly, they can induce doubts about „obviousness” of our philosophical traditions. It is the main goal of Leszek Nowak’s metaphilosophy: metaphysics should release human discursive powers from imprisonment of common sense. Krzysztof Kiedrowski’s book is the first step in the (postulated) reception of Leszek Nowak’s metaphysical system.

*Keywords:* Leszek Nowak, metaphysics, ontology, dialectics, bundle theory, possible worlds, negativity