

SPIS TREŚCI

ARTYKULY

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The main purpose of the article is to compare the originally Greek, Plato's concept of dialogue and its function in the procedure of philosophizing to the one developed by the 20-century "philosophy of dialogue" (F. Rosenzweig, M. Buber, F. Ebner, E. Levinas).

It seems quite astounding that philosophy of dialogue, a trend which consistently and persistently defends the privileged position of dialogue in the structure of reality and uses it as an essential factor in the understanding of the relation between God and Man, has not developed any solid methodological perspective. What is even worse, it failed to observe its presence in the very core of philosophical thinking, i.e. in Plato's thought. We are capable of reconstructing Plato's *modus philosophandi* with its essential conditions: the philosopher must not only 'see' the truth (the noetical function), but must also tell it to the others, choose the partners of the dialogue and defend his *logos* if necessary (the apophantical function).

The article consists of two complementary analyses: the first one is devoted to the presentation of the dialogical factor in Plato's noetics and apophantics, and the second one focuses on Rosenzweig's criticism of the whole European philosophy. The author tries to indicate its doubtful moments by -putting forward the question whether Plato's philosophy may be justly ascribed to the tradition under Rosenzweig's criticism, and if so, to what extent.

Summarized by Michał Bardel

Słowa kluczowe: dialog, filozofia dialogu, dialogika, rozmowa, Platon, Rosenzweig.

Key words: dialogue, philosophy of dialogue, conversation, Plato, Rosenzweig.

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In his philosophy P. F. Strawson employs the method of analysis, which he describes as "[...] resolution of something complex into elements and the exhibition of the ways in which the elements are related in the complex."

During fifty years of his philosophical activity Strawson has worked out two conceptions of analysis: the analysis of ordinary language and the connective analysis. In general Strawson's contribution to philosophy may be viewed as an elaboration of his conception of analysis and its deployment for particular cases.

In the article the Author presents Strawson's criticism of the following conceptions of analysis: reductive analysis, therapeutic analysis and analysis as construction of a conceptual map. Then she gives an account of Strawson's analysis of ordinary language and his connective analysis. In conclusion she tries to point out difficulties connected with this method of analysis.

Summarized by Gabriela Besler

Słowa kluczowe: filozofia P. F. Strawsona, analiza, metoda.

Key words: P. F. Strawson's philosophy, analysis, method.

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Language as Result of the Fulguration Process in Konrad Lorenz's Approach (Sum.)	53

The article presents the conception of biological conditionings of language in Konrad Z. Lorenz's approach. In Lorenz's works the category of fulguration is the main philosophical category. It means the creation of 'something new' as result of the process of a sequence of phenomena that are causally related. Viewing the human race from the historical perspective Lorenz differentiates two important fulgurations, called superfulgurations. One of them is the transition from the "experiencing I" to the "conscious I". Development of man's mental sphere made it possible to form "verbal speech". More broadly, in Lorenz's approach, also culture has its subjectivization in nature. Cognition is an element of an organism's behavior, and what is more, every mechanism of learning evolved phylogenetically. However, this does not result in strict determinism - various cultures are developed independently of one another. In the process of development of culture a special role is played by symbolization. Lorenz differentiates two types of symbols: symbols of a group (e.g. emblem) and language symbols. Language symbols were created in the regularity formed in the process of phylogeny, that is in conceptual thinking. In his philosophical explanation of the language structure Lorenz uses the data supplied by particular sciences. Moreover, language behaviors of particular people are conditioned by their personal experiences, and by the definite social and cultural milieu they live in.

Translated by Tadeusz Karłowicz

Słowa kluczowe: antyredukcjonizm, ewolucja, filogeneza, fulguracja, kultura, przyroda, super-fulguracja, symbol, wiedza, wzorzec zachowania.

Key words: anti-reductionism, evolution, phylogeny, fulguration, culture, nature, superfulguration, symbol, knowledge, behavior pattern.

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The article tries to answer the following questions: Why did Lewis Carroll's ideas, expressed in the form of fairy tales, fascinate numerous analytical philosophers? What does Carroll's contribution to the contemporary logic and philosophy consist in?

The basic thesis of the article is that Lewis Carroll - remaining in the Anglo-Saxon tradition of David Hume's and George Berkeley's philosophy - supplied material illustrating the problems connected with the use of language. He showed how improper use of language leads to formation of philosophical problems.

The article presents Carroll's output. He was one of the pioneers of symbolic logic that he developed in Boole's and De Morgan's tradition - in the field of the so-called recreation mathematics that he popularized in the form of riddles, puzzles, doublets and puns, compared by some logicians to a formal system.

The article presents the essence of the theory of language developed by Carroll, in which language may be something hermetic with only one person having access to it (the case of Humpty Dumpty), but also something common, something social (Alice's conversation with the White King). Attention is paid to the fact that Carroll differentiated between what is nonsensical and what is absurd (the criterion being its relation to logic). It is pointed that Carroll's aim was first of all discovering the nonsense that is hidden behind the formulation of a metaphysical problem.

In the article also the connections are studied between Carroll and Ludwig Wittgenstein, the relation between them being seen in the view that absurd introduced by means of humor is a kind of vaccine that is supposed to protect us from forming absurdity in philosophy.

In conclusion it is stated that Carroll's ideas that are the most significant for analytic philosophers are concerned with the nature of language that is not a transparent medium for him, but something that offers resistance when we communicate with others, as well as something that may be flexible and adjusted to our will. By manipulating language Carroll shows in what way philosophy balances between sense and nonsense and how often philosophical questions arise from erroneous use of language and erroneous posing of problems.

Translated by Tadeusz Karłowicz

Słowa kluczowe: Lewis Carroll, absurd, język, filozofia analityczna, logika, Ludwig Wittgenstein.

Key words: Lewis Carroll, absurdity, language, analytic philosophy, logic, Ludwig Wittgenstein.

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Les structures cognitives du sujet dans l'épistémologie gonséthienne (Rés.)108

L'article se compose de trois parties: 1) L'explication des notions fondamentaux, 2) Les inaliénables du sujet épistémique, 3) L'ouverture des structures cognitives.

Cet article présente la conception du sujet épistémique chez F. Gonseth. Je considère les déterminants subjectifs de la connaissance: les essences, les intuitions et les inaliénables. Pour Gonseth les essences sont des éléments de la conscience. La conscience est équipée d'un registre d'essences de divers types: essences sensorielles, rationnelles, émotionnelles, etc. Essences sont pour lui des données innés de notre équipement mental. On peut dire des essences gonséthiennes que ce sont des inaliénables. L'esprit humain est capable de les dépasser, d'acquérir des intuitions étrangères à notre état naturel primitif.

Gonseth oppose sa phénoménologie ouverte à la phénoménologie husserlienne. (La phénoménologie d'après Gonseth, c'est l'étude de ce qu'il a appelé les « essences ».)

Résumé par Jerzy Kaczmarek

Słowa kluczowe: intuicja, istota, niezbywalności (to, co niezbywalne), otwartość (otwarcie), poznanie dialektyczne, epistemologiczny układ odniesienia, struktury subiektywności.

Mots-clefs: intuition, essence, inaliénable, ouverture, connaissance dialectique, référentiel, structures de la subjectivité.

Key words: intuition, essence, inalienable, opening, dialectical knowledge, reference frame, structures of the subjectivity.

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The subject of the article is the question of the nature of heavenly bodies in St Thomas Aquinas' approach. The Dominican thinker, using Aristotle's cosmology, tries to present his understanding of the Stagirite's theory concerning natural indestructibility of heavenly bodies, which he treats as relatively perfect beings built of ether and

indestructible in the world of nature, although they are contingent and created by God. The issue proves the Angelic Doctor's independence and self-reliance; studying the universe he not only used Aristotle's cosmology but he verified it with theological knowledge basing his considerations on the ancient and medieval commentators of the Greek philosopher. In St Thomas' studies his conviction about relative formal and material perfection of metaphysical components of heavenly bodies is of significant importance. The conception of indestructibility of heavenly bodies also presents methodological assumptions of the metaphysics developed by the Dominican thinker who made the rules of Aristotle's philosophy relative.

Translated by Tadeusz Karłowicz

Słowa kluczowe: filozofia średniowieczna, św. Tomasz z Akwinu, tomizm, ciała niebieskie, kosmologia, metafizyka, arystotelizm chrześcijański.

Key words: medieval philosophy, St Thomas Aquinas, Thomism, heavenly bodies, cosmology, metaphysics, Christian Aristotelianism.

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Starting from the 1930s logicians tackled problems connected with applicability of logic in natural sciences and in many cases they tried to practically apply logic in these sciences.

In the article entitled 'Logicians and logic on study of nature' it is stressed that the broadly understood formal logic supplies natural sciences, and especially physics, with a paradigm for a method of ordering theses. It is also shown what application of logic laws to natural sciences consists in, and theses are formulated concerning what the laws of classical propositional calculus state. A lot of attention is devoted to the language of modern and contemporary physics. Modern and contemporary physics uses two languages, i.e. the mathematical language and the so-called notional language. The logic of the former language is classical logical calculus. In connection with the notional language logicians construed a lot of systems of non-classical logics in which laws are given that govern the correct use of non-extensional operators connected with such terms occurring in natural sciences as "time", "cause", "change" etc. The language of well construed systems of non-classical logics may serve saving, storing and precise communicating the results obtained on the ground of natural sciences.

Translated by Tadeusz Karłowicz

Słowa kluczowe: logika, funktor prawdziwościowy, funktor nieprawdziwościowy, dwuwartościowy rachunek zdań, wielowartościowy rachunek zdań.

Key words: logic, truth-functional operator, not truth-functional operator, two valued propositional calculus, many-valued propositional calculus

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Alfred Tarski's T-Scheme as a Definitional Equivalence (Sum.)	155

The goal of this paper is to present a way of reading Alfred Tarski's T-scheme as a definitional - and not material - equivalence. Anil Gupta and Nuel Belnap in their book *The Revision Theory of Truth* (MIT 1993), develop a theory of truth and a theory of definition, which are called *Revision Theories - of Truth (RTT)* and *of Definition (RTD)*. They accept Tarski's T-sentences (such as: "snow is white" is true iff snow is white) and their central role for the signification of truth. According to *RTT* and *RTD* the centrality of Tarski's T-sentences can be maintained only by accepting interdependent definitions. Gupta and Belnap claim that it is worthy to read the T-scheme as a definitional equivalence rather than as a material equivalence, for the former understanding allows us to solve the Liar paradox. To obtain this result, it is important to notice a structural similarity between the T-scheme and the general scheme of definition.

Gupta and Belnap reject Tarski's demand for formal correctness of definitions and claim that it is logically justified to accept circular definitions. This is why they modify a general scheme of definition by adding a predicate which is being defined (*definiendum*) - e.g. an arbitrary predicate *G* — to the *definiens*, i.e. to the defining formula which occurs on the right side of the definitional scheme. A circular definition, which is constructed in such a way, is helpful in showing that different patterns of behaviour of the predicate *G* are similar to respective patterns of behaviour of the predicate "true". Such a result suggests that the concept of truth is itself circular.

Summarized by Robert Kublikowski

Słowa kluczowe: Umowa P (Konwencja T), schemat T, T-równoważności, prawda, definicja, definicja cyrkularna, cyrkularność, rewizja, rewizyjna teoria definicji, rewizyjna teoria prawdy.

Key words: Convention T, T-scheme, T-sentences, truth, definition, circular definition, circularity, revision, revision theory of definition, revision theory of truth.

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Lublin Protagonists of Philosophy of Nature and Their Model Inspirations (Sum.)	164

One can say about two sources of philosophy of nature created at the Catholic University of Lublin.

One of them was the Theological Faculty at the Warsaw University in the 50s of the previous century. The scientific climate functioning in it induced Rev. Stanisław Mazierski to put through a profound examination the traditional style which then dominated in cultivating philosophy of nature. That analysis showed necessity of opening philosophy of nature to achievements of the contemporary science, especially of mathematical and physical structure.

The second source constitutes the Faculty of Natural Sciences of the Mary Curie-Skłodowska University in Lublin and the Holy Cross Mountains. Rev. Włodzimierz Sedlak, bewitched by nature, by its mysteries and by contemporary science investigating them, and endowed with the enormous intuition, interlocked a lot of scientific domains, forming a whole and proposing a fascinating view of the world. Some people were alarmed by it, some others were even resentful of it.

The both above-mentioned sources, *mutatis mutandis*, exist till the present day. Each of them, in spite of their dissimilarity (taking into account at least different personalities of the both protagonists of philosophy of nature created at the Catholic University of Lublin) demands philosophy of nature to be an unconventional, and made in novel fashion, form of "philosophizing over this nature". These both styles of "philosophizing over nature" have been enriching themselves and have been evolving and prospering. They are present and alive among continuators of the protagonists' work.

The contemporary philosophy of nature, being still created in Lublin, is the only one, when comparing it to that of performed at other universities of this country and of the world outside.

Translated by Jacek Zembruski

Słowa kluczowe: filozofia przyrody, lubelscy protagoniści filozofii przyrody, Włodzimierz Sedlak, Stanisław Mazierski.

Key words: philosophy of nature, Lublin protagonist of philosophy of nature, Włodzimierz Sedlak, Stanisław Mazierski.

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Riemann Hypothesis: Reflections on the Greatest Mystery of Mathematics (Sum.)	182

The article presents a few aspects of the most important of the unsolved problems of mathematics, the Riemann hypothesis, in the context of the most recent results. The so-called Lehmer's phenomenon discovered half a century ago and recently studied very intensively, as well as Newman's hypothesis concerning the de Bruijn-Newman's constant that is connected with it, seem to suggest that unexpectedly controversial

elements sneak into mathematics, and they can be seen even on the level of the language used in it. This probably results from the fact that even the best tools that mathematicians at the moment have at their disposal and by means of which they try in vain to verify the Riemann hypothesis are - for fundamental reasons - inadequate.

Translated by Tadeusz Karłowicz

Słowa kluczowe: teoria liczb, liczby pierwsze, hipoteza Riemanna.

Key words: number theory, prime numbers, Riemann hypothesis.

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Anna Modrzejewska, Arthura W. Burksa twierdzenie o dodawaniu zbędnego warunku	183
Arthur W. Burks's Theorem on Adding a Superfluous Condition (Sum.)	195

In the first part of the article true expressions and false expressions are presented that served A. W. Burks to build a formal system of logic of causal propositions along with considering their later use in the system built in 1963.

In the second part of the article the possibility of conducting an axiomatic proof of the theorem on adding a superfluous condition is analyzed. The consequences are also shown of substituting a negation of the same prepositional variable for the propositional variable and conditions are analyzed of substitution for propositional variables and possibilities of avoiding those difficulties.

Translated by Tadeusz Karłowicz

Słowa kluczowe: twierdzenie o dodawaniu zbędnego warunku, kontrfaktyczna i kauzalna implikacja, system logiki zdań kauzalnych.

Key words: theorem on adding a superfluous condition, counterfactual and causal implication, system of logic of causal propositions.

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Marcin Mołski, Nielokalność i biokoherencja	197
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In a series of quantum experiments performed in 1935-1986 a validity of the quantum theory has been tested. The results obtained have changed the viewpoints of physicists and philosophers on the nature of the Universe and physical reality. In particular, they have changed the traditional West view on the relationship between micro- and macro-level, between a part and the wholeness and between the system and its constituents. From

the distinguishing quantum experiments a brief description of the Einstein-Podolsky-Rosen paradox, the Bell's inequality and the Aspect-Dalibard-Roger experiment is made. The results obtained are important for the concept of the bioplasmatic transfer of information in the living systems, developed by Włodzimierz Sedlak. According to the Sedlak's idea, the bioplasma is a local concept, so it does not take into account the possibility of a faster than light signaling. Because in the living systems the long-range quantum correlations should appear, the concept of bioplasma should be generalized to include the non-local quantum effects. As a consequence - such a dynamic quantum system as bioplasma has to be non-local - all its elements are connected because of quantum correlations, regardless of the distance between them. A model of the biocoherence for the systems described by the Gompertz function is presented. In this approach, the Gompertz function is a solution of the space-like (tachyonic) Horodecki-Feinberg equation with the time-analog of the Morse potential function. It is shown that Gompertzian systems evolve coherently and non-locally in the space. The presented model admits a continuous and instantaneous transfer of "influences" between micro-level represented by the single cell and the macro-level represented by the biosystem (tissue, organ, organism) as a whole. A consequence is the integration of organism and its coherent development on all levels of the bio-existence.

Summarized by Marcin Molski

Słowa kluczowe: nielokalność, kwantowe splątanie, koherencja, układy gompertzowskie, biokoherencja

Key words: nonlocality, quantum entanglement, coherence, Gompertzian systems, biocoherence

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The article exhibits the problem of God's action in the world as it is presented in process philosophy. Whitehead conceived actuality as heterogenous category within which we can distinguish two modes: actuality of being and actuality of becoming. The second one is the actuality in primary sense; there is ontological primacy of becoming over being. Being is, according to J. L. Nobo's interpretation, a product of becoming and not vice versa. Actuality of being depends on being-for-becoming. Actuality of becoming depends on prehending being into subjective immediacy of internal process of concrescence. Because of subjective character of becoming, an entity which is still becoming, cannot be prehended. It means that entity cannot play any role in becoming of other entities. Only entity whose process of concrescence has completed, entity which is in fact being, can play such a role. If God is a main exemplification of becoming, as primary actual, He is impenetrable. He cannot be objectified and His actuality is only actuality of subjective arrested immediacy. He cannot influence the world. Many process

philosophers tried to solve the dilemma. One of them is Lewis S. Ford whose proposal depends on introducing the third mode of actuality: the future creativity. But Ford does not consider basis of that temporal paradigm of actuality and doesn't examine its justification. So what we need is a reconstruction of Whitehead's philosophy which will let us check his ontological, epistemological and methodological presuppositions and asses whether the temporal paradigm is justified, whether the God-world problem really arises and whether it is possible to solve it in terms of process theory of actuality.

Summarized by Marek Piwowarczyk

Słowa kluczowe: filozofia Boga, filozofia procesu, A. N. Whitehead, relacja Bóg-świat, byt i stawanie się.

Key words: philosophy of God, process philosophy, A.N. Whitehead, God-world relation, being and becoming.

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Marcin Tkaczyk, Prawa logiki i prawa przyrody w ujęciu Johna Bigelowa i Roberta Pargettera	245
The Laws of Logic and the Laws of Nature in John Bigelow and Robert Pargetter's Approach (Sum.)	261

J. Bigelow and R. Pargetter in their work *Science and Necessity* put forward a theory of the laws of nature as statements objectively different with respect to their modal qualification both from the laws of logic and from contingent truths. Contrary to the latter ones all laws are characterized by necessity. However, there are various kinds of necessity. The laws of logic are characterized by logical necessity, and the laws of nature - by natural necessity. The objective basis for differentiating modal qualification of statements belonging to the particular classes is that laws are truths about *possibilities*, also the ones that have not been actualized. The source of difference between logical and natural necessity is the differentiation between the range of possibilities described by respective laws. Hence, laws of nature prove to be - which is not mentioned by the authors - a posteriori necessary statements. The modal character has been the basis of the explanation of other considered properties of scientific laws: *certain generality* and the so-called *range void*.

Translated by Tadeusz Karłowicz

Słowa kluczowe: prawo logiki, prawo przyrody, konieczność logiczna, konieczność przyrodnicza.

Key words: law of logic, law of nature, logical necessity, natural (nomic) necessity.

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The article presents Albert Einstein's standpoint on the issue of mutual relations between science and philosophy. First the metaphilosophical context of that standpoint is shown. It concerns the conception of science and philosophy accepted by the author of the relativity theory.

Findings in that field showed that Einstein opted for close connections between science and philosophy and he treated them as both influence of philosophy on science and influence of science on philosophy. In the first case, the influence of philosophy is marked, according to our author, first and foremost in science treated as a process. It manifests its presence mainly in the procedures of discovering new scientific theories, their selection and acceptance. However, it is not present in the procedures of direct justifications of those theories.

Einstein also saw the presence of philosophy in science treated as a product. Then philosophy enters scientific theories in the form of general principles and assumptions placed in the so-called exterior base of the theory, whereas, according to Einstein, the presence of philosophical theses in the main body of the scientific theory as their immanent element is not permitted.

As far as the influence of science on philosophy is concerned our author states that it has a twofold dimension. The very fact of existence of science and procedures that take place in it as well as changes show their influence on issues taken up by epistemology and philosophy of science. Concrete scientific achievements mark their reference to the problems considered within the confines of broadly understood philosophy of nature.

Einstein's standpoint clearly lacks deepened logical-methodological analyses concerning the issue of mutual connections between science and philosophy presented here.

Summarized by Józef Turek

Słowa kluczowe: Einstein, relacje nauka i filozofia.

Key words: Einstein, mutual relations of science and philosophy.

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Marian Wnuk, Włodzimierz Sedlak wobec zagadnienia genezy życia: od biochemii krzemu poprzez bioelektronikę do teologii światła	309
Włodzimierz Sedlak's Contribution to the Study of the Origin of Life: From Biochemistry of Silicon across Bioelectronics to Theology of Light (Sum.)	319

The subject of the presentation was to reveal the main components of the views of Rev. Włodzimierz Sedlak (31.10.1911-17.02.1993) concerning the origin of life. The development of these views passed through the following stages: 1) the theory of silicic life forms (1959-1967) which he labeled "the theory of siliconides", 2) the bioelectronic

model of abiogenesis (1967-1988), and 3) speculations about electromagnetic biogenesis.

The basic claims of the theory of silicic life forms are the following: (a) silicon is an essential component of biosystems and fulfils significant roles in phylogenetically older forms of life; (b) the previous essential role of silicon in the organization of life has been reduced in higher organisms to the role of a microelement; (c) the attempts at the reconstruction of the chemical evolution of life should be undertaken, to extend it beyond the organic compounds of carbon, namely to those containing silicon and forming the most primitive forms of life on the Earth; (d) hypothetical silicic organisms made up the most primitive life on the Earth..

The main theses of bioelectronic model of abiogenesis are the following: (a) there exists the coupling between chemical reactions and electronic processes in organisms (he calls it "the quantum seam of life"); photons act as a coupling factor between these two classes of processes; (b) the existence of the such coupling makes the generation and duration of the plasma state of particles possible in all metabolizing parts of the organism; (c) there exists bioplasma - a new state of matter - that is characteristic for living organisms only; (d) the first act of the creation of the chemical-electronic coupling is to be regarded as equivalent with biogenesis; (e) bioplasma existed well before the macroscopic organic morphological structures were formed and functioned already when the life was based on aluminosilicates.

Sedlak's speculation on the electromagnetic biogenesis implies that the evolution of biosphere began with the moment of birth of light, i.e. in one of the earliest phases of existence of Universe. God, identified by him with the Light, created life, possessing the luminous nature. Life never altered its electromagnetic foundation: either at any new stage, or at a new level of organization, or when the first human being was created.

It seems that Sedlak's works can be valuable for the present and future investigations aimed at the reconstruction of biogenesis. Although they are undervalued now, they should be regarded as containing many valuable intuitions. They deserve a thorough analysis and - where it is possible - empirical testing of implications drawn from them.

Translated by Marian Wnuk

Słowa kluczowe: Włodzimierz Sedlak (1911-1993), powstanie życia, krzem, krzemowe formy życia, biogeneza elektromagnetyczna, bioelektronika, paleobiochemia.

Key words: Włodzimierz Sedlak (1911-1993), origin of life, silicon, silicic life forms, light, electromagnetic biogenesis, bioelectronics, paleobiochemistry.

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