

# **ОТ ВЪЗМОЖНОТО КЪМ ДЕЙСТВИТЕЛНОТО**

Философски, исторически и методологически  
проблеми на научното познание

# **Contributions to the European History of Ideas**

Volume 2

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**YVANKA B. RAYNOVA**

Bulgarian Academy of Sciences / Institute for Axiological Research (Vienna)

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и дискусиите около рецепцията му

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## ENGLISH ABSTRACTS

### Introduction

*Yvanka B. Raynova*

#### ON THE PHILOSOPHICAL CONTRIBUTION OF AZARYA POLIKAROV AND THE DISCUSSIONS AROUND ITS RECEPTION

In her Editor's Introduction to the Collected Paper Volume Raynova presents the different assessments of Polikarov's philosophical contribution in Bulgaria and abroad, as well as his own self-assessment. Hence, she raises a broader question for discussion, namely of how to interpret more completely the legacy of an important thinker and its place in a particular philosophical tradition. In addition to hermeneutic and comparative procedures, Raynova emphasizes the importance of more detailed analyzes of the cultural context and the sociopolitical situation in which the author lived and worked.

Keywords: Azarya Polikarov, philosophical reception, philosophy of sciences, Marxist debates

### I. Chapter

#### PHILOSOPHY AND METHODOLOGY OF SCIENTIFIC THEORIES

*Dimiter Tzazov*

#### AZARYA POLIKAROV'S POSITION IN THE CONTEXT OF THE DEBATES BETWEEN DOGMATICS AND REVISIONISTS IN THE EARLY 1960s

On the basis of Azarya Polikarov's speech in 1962 at the Scientific Conceal of the Institute of Philosophy in Sofia, an attempt is made to sketch some leading trends in the scientific and socio-psychological atmosphere at the Institute of Philosophy in the 1960s, outlining two conflicts: Azarya Polikarov versus Todor Stoychev (Communist Party secretary of the Institute), and the defense of the philosopher Bernard Muntyan by Azarya Polikarov.

Keywords: philosophy in Bulgaria, cult of personality, dogmatists, revisionists, ideology

*Lilia Gurova*

PROLIFERATION AND SYNTHESIS IN CONTEMPORARY  
PHILOSOPHY OF SCIENCE: THE DISCUSSIONS ON THE  
FACTIVITY OF UNDERSTANDING

The divergent-convergent approach developed by Polikarov presents the problem-solving process as consisting of two phases: a phase of divergence and a phase of convergence. The divergence phase ends with the generation of the fullest possible field of possible solutions. Proliferation is a process that serves this purpose. The convergence phase ends with the selection of the best solution. Sometimes, however, the best solution is not among those available in the field of possible solutions, but is achieved by synthesizing some of these solutions. For Polikarov, synthesis is always a conscious goal. This paper examines an example from recent philosophy of science related to the discussions on the factivity of understanding, which shows that a tendency towards synthesis can arise without it being consciously sought, as a by-product of the proliferation process.

*Drozdstoy Stoyanov*

RESURRECTION OF POLIKAROV: THE DIVERGENT-  
CONVERGENT METHOD IN SOLVING THE MIND-BRAIN  
PROBLEM

The psychophysical problem defines the hybrid structure of the shared field of neuroscience and psychopathology. In that field there collide nomothetic and ideographic notions and methods, which imply very often heterogeneous meaning. This paves the ground for the incoherence in the theories of mental life, which vary from extreme and deterministic forms of reductive materialism to incongruent tacit positions of interactionist dualism. By means of Polikarov's divergent-convergent method we were able to trace the co-evolution of neuroscience and the sciences about mental health, through divergent field of possible solutions in the discourse of the XIX century, to a reduced group of predominant project-solutions based on evidence from neuroscience. This group is comprised of identity theory of mind, applied to more



basic mental phenomena, and supervenience theory of mind, applied to complex psychological functions.

Those project-decisions were tested empirically by use of innovative paradigm for functional magnetic-resonance imaging of the brain, where brain signal is registered simultaneously with the item responses to psychological diagnostic tools. The results support to a great extent the proposed project-solutions of the psychophysical problem in psychopathology. Our data on conceptual, empirical and meta-empirical level confirm the validity of the heuristic divergent-convergent method for problem solving, by Polikarov on trans-disciplinary level.

Keywords: divergent-convergent method, mind-brain problem, neuroscience, neuroimaging

*Plamen Damyanov*

#### THE ANALOGY AS A METHOD OF BUILDING MODELS IN SCIENCE

Based on Azarya Polykarov's ideas in the field of methodology of science, the author presents analogy as one of the epistemological methods. The development of analogy is described as a heuristic method of knowledge from antiquity to present with a focus on the fields of natural sciences such as mathematics, mechanics, particle physics and cosmology. Henceforth are analyzed the possibilities and the limitations of this method for building life-sized models in certain scientific fields, such as atomic physics, classical mechanics, hydrodynamics, quantum mechanics and space physics.

Keywords: methodology, analogy, hydrodynamics, atomic physics, scientific models, mechanics.

### II. Chapter

#### THE COMPLEX RELATIONSHIP BETWEEN PHILOSOPHY AND SCIENCE

*Yvanka B. Raynova*

#### THE PROBLEMATIC RELATIONSHIP BETWEEN PHILOSOPHY AND SCIENCE IN PHENOMENOLOGY

Since the 19th century, following the rapid rise of the sciences and the changes in the understanding of scientificity, the status of philosophy has

been called into question: philosophy has been forced to fight not only for recognition, but even for its right to exist. The denial of philosophy's scientificity and achievements by scientists and technocrats, and hence the destabilization of its place and position within society and academia, led to the "identity crisis" of philosophical knowledge. The different reactions of philosophers in this respect can be reduced, in the final analysis, to two opposing positions: the attempt to justify anew philosophy as a kind of science or the refusal of such a justification. There are also some attempts at intermediate solutions that mainly try to blunt, if not to eliminate, the opposition between philosophy and science. This paper offers a fleshing out of this general picture by presenting the various paradigmatic solutions proposed by Brentano, Husserl, Heidegger and Ricoeur. The thesis of Raynova is that the anti-scientism, which is considered to be inherent to the phenomenological schools, does not necessarily imply a negation of the sciences and scientificity. What the phenomenologists deny is scientific reductionism, i.e., the reduction of knowledge to the factual cognition, the naturalization of intentions, or the presentation of thinking as a pure consequence of biochemical processes. Henceforth, phenomenologists take different positions on the question of the relation between philosophy and the sciences and even arrive at opposing views.

Keywords: Brentano, Husserl, Heidegger, Ricoeur, phenomenology, scientificity, philosophical thinking

*Gabriela Kasarova*

THE RELATIONSHIP PHILOSOPHY–SCIENCE  
IN WITTGENSTEIN'S WORK: THE CRITICAL INTERPRETATION  
OF ALEXANDER KANEV

The aim of the article is to present the interpretation of the Bulgarian philosopher Alexander Kanev – one of the most serious researchers of Wittgenstein in Bulgaria – on the relationship between philosophy and science in Wittgenstein's philosophy. A particular emphasis is placed on the problem of the legitimization of philosophy in the context of the growing influence of the sciences. In this connection is posed the question if Wittgenstein's pessimistic vision of the future of philosophy is justified or not and demonstrated how Kanev manages to argue the need for philosophy today and in the future.

Keywords: Alexander Kanev, Ludwig Wittgenstein, philosophy, scientific knowledge, historicism, consensus, philosophical problem, language-game

*Galina Dekova*

ART HISTORY – A DISCIPLINE BETWEEN  
PHILOSOPHY AND SCIENCE

The article traces the development of art history as a discipline that operates on the border between the scientific and the subjective attitude to art. Today, with the term “art” we also indicate a field of syncretism and intersections with many levels of presence and realization in society. The theory of art has accumulated a huge amount of source material and the need for systematization is becoming increasingly apparent. The main trends of the early twentieth century as formalism, the history of the spirit, methods such as iconology and iconography have received a new reading at the intersection with critical theory. Thus, the tone in this discipline, born of the German philosophical tradition, is already set mainly by authors from overseas. The situation is defined as post-postmodern and the attention is focused mainly on the crisis of art history as an independent scientific discipline, caused by a reluctance to understand the real contradictions embedded in it.

Keywords: art history, philosophy of art, methodology, style

**III. Chapter**

**SCIENTIFIC KNOWLEDGE, VALUES AND RELIGION**

*Stefan Penov*

CREATION AND/OR EVOLUTION:  
PHILOSOPHICAL AND SCIENTIFIC ASPECTS,  
OR APOLOGY OF THE PHILOSOPHICAL LOGOS

The main thesis of the author is that religion and science are the existential needs of the human spirit. But many see a contradiction between both. Where does it come from, and how can the original unity be restored? From the position of Hegel (Encyclopedia §1): “Philosophy and religion have as their subject the truth, and it is the truth in the highest sense of the word that God and He alone is truth.” Further, both deal with the realm of the finite, nature and the human spirit, and their relationship to each other and to God as their truth. Science and religion have different fields of application, but they sort

of illuminate the same objective reality from different points of view. Thus, they complement each other, they are not contradictory in themselves, but only in the scattered mind of the pragmatist, atheist thinkers, or the ignorance of the naive realist. And since man is created ontologically unified, he must find truth, peace and faith in the unity of his Self, which will lead him along the Path of Truth and Life. Religion and science can relate to each other as religious and secular, church and state, soul and body.

The questions of creation and evolution are much more complex, and here are at least ten basic concepts between creationism and the materialist realism. More important is not whether there are developments and degrees of perfection in the world, but the question is: How has been constructed their determination and what are the causal links and interactions? All these problems are unsolvable without mastering and using the dialectical logic that began with Plato, but was created by Hegel and successfully interpreted and applied by Whitehead.

Keywords: Hegel, Whitehead, religion, scientific knowledge, creationism, materialism, naïve realism

*Tatiana Batuleva*

#### ON THE INTERPRETATION OF VALUES IN THE WORK OF RADOSLAV TSANOFF

Can scientific knowledge help us to save humanity? In her article, Batuleva shows that for Radoslav Tsanoff scientific knowledge is an undeniable value, an unconditional good, and yet we cannot fully trust it without a preliminary clarification of the question of how knowledge relates to other values, what is its effect on individual human experience on the one hand, and on the social existence on the other. Batuleva displays how Tsanoff's theory of values serves as a foundation and a link between the ethical, scientific and sociopolitical discourses. The original optics he has chosen, aims to inscribe moral imperatives in scientific, economic and political relations. This leads him to build a new scale of values, because without a "vital moral principle", any economic or political reform would lose its positive charge.

Keywords: Radoslav Tsanoff, value theory, ethics, scientific knowledge, economy, sociopolitical reforms

#### **IV. Chapter HISTORY OF SCIENCES**

*Jordan Avramov*

##### **THE EARLY ROYAL SOCIETY OF LONDON AND THE OTTOMAN EMPIRE: THE EVIDENCE OF THE CORRESPONDENCE OF HENRY OLDENBURG**

Right from its beginning in 1660 the Royal Society of London embarked on a program of research in natural history. It inevitably included the Ottoman empire and was mostly organized by the first secretary of the Society, Henry Oldenburg, who took care of the business in those first formative years of the scientific academy. His correspondents were able to provide information from various parts of the Empire, but also from neighboring countries and regions. In this process a special role played the so-called questionnaires for natural history, which were designed by the Society's Fellows and shaped not simply the research but also the correspondence itself.

Keywords: Royal Society of London, Ottoman Empire in the seventeenth century, scientific communication, questionnaires for natural history

*Peter Bachmaier*

##### **AZARYA POLIKAROV AND THE TRANSFORMATION OF SCIENCE IN THE PEOPLE'S REPUBLIC OF BULGARIA**

Science was an important factor in the "construction of socialism" in Bulgaria, and Prof. Azarya Polikarov played a significant role in this respect. He developed the so-called divergent and convergent method in solving of scientific problems and applied it to different sciences (history, logic, physics and cosmology as well as philosophy and philosophy of science). Among the results obtained in this way are: the possible and legitimate interpretations of the relations  $E = mc^2$ ; the relevant conceptions of determinism and causality in physics, the conceivable hypotheses about quasars, and the relations between empirical and theoretical knowledge. In addition, Polikarov made proposals for a metaparadigm of scientific development, for a typology or classification of the sciences, as well as a classification of interdisciplinary fields.

Keywords: Azarya Polikarov, convergent divergent method, solution of scientific problems, classification of sciences

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