

A MONOGRAPH IN THE FIELD OF PHILOSOPHICAL LOGIC

Kristeva, S. (2018). *Genesis and Field of Logical Theory. Studies in Philosophical Logic*. Sofia: Faber

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Abstract. The monograph *Genesis and Field of Logical Theory. Studies in Philosophical Logic* by Silviya Kristeva is research exposed in the context of contemporary Bulgarian studies in the field of philosophical logic. In this book, Kristeva offers fundamental construction of philosophical-logical paradigms which constitute the continuum of logic: the basic Aristotelian paradigm, the Kantian-Hegelian theory of logical forms, the 19th century logical theory as a synthesis of logic and mathematics.

Keywords: logic; modern logic; logical forms; Kant; Hegel; Wittgenstein; Cantor

The monograph *Genesis and Field of Logical Theory. Studies in Philosophical Logic* by Silviya Kristeva (Department of Philosophy, South-West University) is fundamental research exposed in the context of contemporary Bulgarian studies in the field of philosophical logic. In this book, Kristeva offers fundamental construction of philosophical-logical paradigms, which predetermine the horizons in front of the contemporary logic. Kristeva gives a certain description of philosophical logic as a meta-logical investigation, as a meta-theory which have to build the universal continuum the innovative logical systems and the revolutionary turns in logic to be exposed and studied in. In this way, we can construct the genesis of logical theories. Kristeva considers three basic philosophical-logical paradigms which predetermine and move forward the theory of logic. First, this is the Aristotelian paradigm with its quantitative and categorical



characteristics. The second paradigm is developed by Kant with the project of a new transcendental logic. According to Kristeva, the third is the 19th century logical theory given in the synthesis of logic and mathematics.

The first research core exposes *Logical Foundations*. The basic logical paradigm is considered in Aristotle's invention of logic as a description and categorization of the existing world. This is the methodological way of how Aristotle derives and structures the logical forms of human thinking. Here, Kristeva introduces a new logical instrument as a response to the necessity to use the universal concepts and constructions in our thinking. This is the *Universe of discourse* developed with its origin in De Morgan's and Boole's logical investigation, and with its definition, axiomatic, with its abilities for objective constructions.

The second part – *Kantian-Hegelian Theory of Logical Forms* offers an investigation of the logical achievements and innovations in the fundamental theoretical systems of Kant and Hegel. Kristeva realizes a detailed analysis and reconstruction of Kant's innovative theory of the judgment and the inference in *Critique of Pure Reason*, as well as the modelling of logical forms of concept, judgment and syllogism in Hegel's *Science of Logic*. As a remarkable result, the foundations of a general system of logical thought-forms are delineated.

In the third part, Kristeva deduces the *Fundamentals of Modern Logic* on the basis of 19th century logical projects. The constituting of the modern logical analysis is traced through logical systems of Frege, Russell, Moore and Wittgenstein, but on the logical innovations realized by De Morgan, Boole and Venn. This allows the whole picture of the rising of modern logic to be deployed.

In conclusion, a consideration of exceptional interest is included. This is the representation and summarizing of the parallel stream in 19th century logic and mathematics: Theory of infinite sets, developed by R. Dedekind and Georg Cantor, which results in deducing of the fundament of the whole mathematics: Theory of sets. Kristeva states an important question – whether the search of such fundament is commensurable with the same search in logic and whether the logical and mathematical construction of infinity is possible. The answer is going to be found out in Cantor's *Theory of transfinite numbers*, Kristeva designates this search as *Logic of infinity*.

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