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# MATHEMATICS, PAST TENSE PRESENT

FESTSCHRIFT ON HISTORY OF  
MATHEMATICS IN HONOR OF  
BORIS ROSENFELD'S 80TH  
BIRTHDAY

JAN PIETER HOGENDIJK  
SERGEI S. DEMIDOV  
THOMAS DRUCKER  
IRVING H. ANELLIS

EDITORS

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ISBN : 1-884905-06-4 (hardcover) ; Price (tent.): \$ 89.95  
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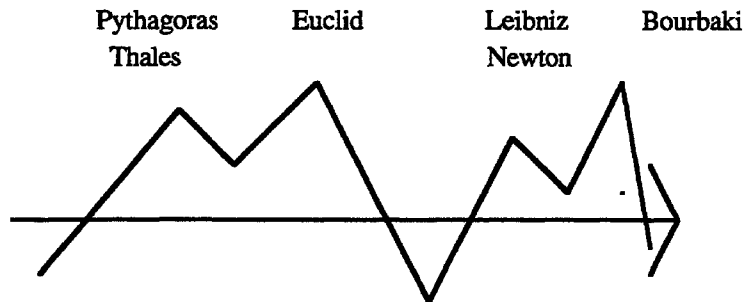
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**ALEXEI G. BARABASHEV, *Long Cycles in  
the History of Mathematics***

**(English translation by Gregory D. Crowe)**

A much enlarged and revised translation of the author's book *Dialektika razvitiya matematicheskogo znaniya*. Gregory Crowe's translation will give readers an appreciation for the acuity and depth of the author's perception, the philosophical profundity of his analyses, and his broad knowledge of the history of mathematics. In the process of developing his thesis, Barabashev has arrived at philosophical insights and conclusions which will contribute significantly to discussions on the philosophy of the history of mathematics. Some of these insights will be absolutely new to philosophers of mathematics, especially those who are unable to avail themselves of the author's writings in Russian. Other of these insights will appear vaguely familiar to readers; but they will discover that this familiarity derives from a close similarity between the conclusions reached by Barabashev and those recently reached independently, but only after Barabashev had already done so, by Western writers in philosophy of mathematics who have only recently begun to approach their subject historically.

Gregory Crowe is preparing to defend his doctoral thesis on history of technology at Harvard University. He worked in close cooperation with the author to produce this translation.



**Volume 1: Russian Philosophy and History of Logic, Mathematics and  
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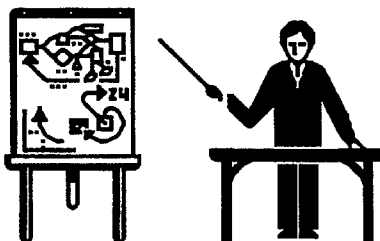
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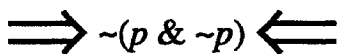
FRED SEDDON, *Aristotle and Łukasiewicz on the  
Principle of Contradiction*

(With a biographical sketch of Jan Łukasiewicz by Jan Woleński)

The author presents a section-by-section evaluation of Łukasiewicz’s analysis of Aristotle’s treatment of the Principle of Contradiction, as this was presented in Wedin’s English translation of Łukasiewicz’s famed article “Über den Satz der Widerspruchs bei Aristoteles.”

“The author’s task is to analyze the principle of contradiction in Aristotle through the glasses of Jan Łukasiewicz. The book makes several interesting points. In particular, the author compares various views on the topic being analyzed as well as various translations of Aristotle’s related writings. Perhaps the most interesting fragment concerns Łukasiewicz’s criticism of Aristotle’s proofs. The author correctly points out that Łukasiewicz confuses here two meanings of “proof”, and that his criticism of the Stagirite’s arguments for the principle of contradiction is unjustified. . . . Also one must agree with the author’s criticism of Łukasiewicz’s view that the principle of contradiction is psychological rather than logical.”

— Jan Woleński (Jagiellonian University)





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If you know van Heijenoort only, or even primarily, as the editor of *From Frege to Gödel . . .*, if you care about the history of logic, . . . you'll want to read . . .

Irving H. Anellis, *Van Heijenoort: Logic and Its History in the Work and Writings of Jean van Heijenoort*

. . . and learn the full range of van Heijenoort's work and thoughts on the history of logic and his contributions to contemporary logic.

Jean van Heijenoort (1912 – 1986) was best known as a historian of logic and was most recognized for his influential anthology *From Frege to Gödel* collecting many of the research papers that shaped the early history of mathematical logic. His own contributions to mathematical logic, especially to the falsifiability tree method, hitherto generally unknown, are detailed here by van Heijenoort's last doctoral student.

Anellis discusses van Heijenoort's academic life and scholarly career. His central themes are van Heijenoort's contributions to mathematical logic and to the study of its history. He uses van Heijenoort's publications, classroom lectures, and unpublished notes and manuscripts to detail these. Also covered are van Heijenoort's education, his development as a teacher, logician and historian of logic, and his views on philosophy of logic and mathematics.

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"This volume is certainly a major contribution to the quickly developing historiography of modern logic, full of information, both important and rare, for the logician, the historian and the philosopher of logic, and even for mathematicians and philosophers at large."

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*. . . A b o u t t h e a u t h o r :*

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*August 1994*

# Journal of the IGPL

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- V. Ja. PERMINOV, *The Problem of the Justification of Mathematics from the Philosophical Point of View*

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Modern Logic Publishing, Ames, Iowa, USA

ISSN 1047-5982



1047 5982 199701 07 1