

## PREFACE

This special issue of Studies in Logic, Grammar and Rhetoric is devoted to new ideas in philosophical logic. The purpose of this special issue is to concentrate on various interrelated aspects of non-classical logics: philosophical, logical and algebraic among them. Modern philosophical logic sets up the different problems trying to

- consider a new logical solution of general philosophical problems like problems about analyticity, predication, entailment, and validity;
- theoretically explicate the notion of a truth value, analyze the relation between meaning and truth-conditions, and examine syntactic and semantic properties of many-valued logics formalized in axiomatic, sequent, tableau etc. style;
- investigate topical problems of fuzzy logics and consider possible applications of many-valued and fuzzy logics in various areas of computer science interest;
- examine syntactic and semantic properties of non-classical logics, including different versions of many-valued logics, fuzzy logics, supervaluationist logics, paraconsistent logics, intuitionistic logic, etc.;
- propose higher-order formalization of informal mathematical reasoning and consider syntactic and semantic properties of higher-order logic;
- investigate the logic of higher-order vagueness and explicate the notion of a higher-order fuzzy class;
- propose different approaches to non-well-founded vagueness and examine a non-well-founded proof theory.

Gabbay and Guentner's 'Handbook of Philosophical Logic' is the most authoritative source dedicated to various tendencies in philosophical logic. This issue does not have pretensions to examine all the existing tendencies. The aim of this issue is to survey some novel ideas in philosophical logic, in particular in many-valued logics (Arnon Avron, Vitaly I. Levin, Vladimir A. Moshchenskii), in the  $p$ -adic case of non-well-founded probability

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theory (Andrei Khrennikov), in intuitionistic logic (Alexander Lyaletski), and in logical methods of recognition (Arkady D. Zakrevskij). This issue also contains an analysis of general problems of philosophical logic (Martin Tabakov, Alexander S. Karpenko, Andrew Schumann).

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