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Preface

The present special issue of *Studia Logica* contains contributions by eight invited speakers (and their co-authors) of the conference *Trends in Logic XI. Advances in Philosophical Logic* that was held at the Department of Philosophy II of Ruhr-University Bochum (Germany) from June 3-5, 2012. Except of the contribution by Hans van Ditmarsch, which is thematically related to his talk at *Trends in Logic XI*, the papers are revised versions of the presentations at Ruhr-University Bochum. All papers have been carefully refereed.

The purpose of *Trends in Logic XI* was to obtain a snapshot of recent developments and advances in philosophical logic,¹ and the papers of the present special issue indeed cover a broad range of up-to-date topics from philosophical logic and present some significant conceptual and technical progress in the areas concerned.

Epistemic logic and the dynamics of belief have been very active fields in philosophical logic and in formal epistemology since many years. Other philosophically important subjects of logical research are modal predicate logics, in particular quantified epistemic logics. The issue contains two contributions to epistemic logic. The paper “Free Quantified Epistemic Logics” by Giovanna Corsi and Eugenio Orlandelli makes use of complex term-modal operators, considers quantification over epistemic agents, and draws a syntactical distinction between *de re* and *de dicto* occurrences of terms. This investigation makes use of counterpart semantics. The other paper, Hans van Ditmarsch’s article “Revocable Belief Revision”, is concerned with revocable (and irrevocable) qualitatively defined belief revision in the context of dynamic epistemic logic.

Within modal logic, the combination of temporal logic, alethic modal logic, and the modal logic of agency forms another closely related area that has seen a significant progress with the development of the seeing-to-it-that theory initiated by Nuel Belnap, Michael Perloff, Ming Xu, and

¹In addition to this special issue, there will be a proceedings volume bringing together refereed contributed papers from the conference. This proceedings volume is to appear in the book series *Trends in Logic*, which is part of the *Studia Logica Library*.

Special Issue: Advances in Philosophical Logic
Edited by **Heinrich Wansing, Roberto Ciuni and Caroline Willkommen**

others. Alberto Zanardo's investigation into "Indistinguishability, Choices, and Logics of Agency" is a contribution to this focal area. Zanardo considers indistinguishability as a generalization of the notion of undividedness of histories passing through a moment of time.

Whereas modal logics have been developed in the first place as extensions of classical logic, other prominent areas of philosophical logic are concerned with various systems of non-classical logic. Over the past three or four decades paraconsistent logic has become a respectable and fully developed branch of formal logic. One paradigm in the area of paraconsistent reasoning are the so-called inconsistency-adaptive logics developed by Diderik Batens and other researchers at the Centre for Logic and the Philosophy of Science at the University of Ghent. In their paper "Computability Issues for Adaptive Logics in Expanded Standard Format", Sergei P. Odintsov and Stanislav O. Speranski present several results concerning the computational complexity of derivability in adaptive logics.

Paraconsistent logic has gained its recognition not the least through Graham Priest's seminal publications. Whereas paraconsistent logic is not committed to dialetheism (the view that there exist true contradictions), Priest as one of the most prominent contributors to paraconsistent logic is also known as the most insistent defender of dialetheism. In his paper "Indefinite Extensibility—Dialethic Style" he considers the notion of an indefinitely extensible concept from a dialethic point of view. This concept offers not only a solution to the paradoxes of absolute infinity but contributes to a diagnosis of the structure of such paradoxes.

The paper "A Hierarchy of Weak Double Negations" by Norihiro Kamide is a proof-theoretical investigation into many-valued paraconsistent logics with weak double negation axioms. These logics are introduced as Gentzen-type sequent calculi, for which completeness and admissibility of cut are proved in a uniform way.

Yaroslav Shramko and Dmitry Zaitsev in their paper "Bi-facial Truth: a Case for Generalized Truth Values" consider what they call "Cartesian classical truth values" representing both ontological and informational (or "epistemic") aspects associated with truth values. In particular, they introduce in this context two one-place connectives which they refer to as semi-classical negations.

The special issue closes with a paper by Marcus Kracht, who raises the question "Are Logical Languages Compositional?". Compositionality is a topic of great concern at the interface between linguistics, philosophy of language, and formal logic. Kracht propounds the sort of provoking thesis that, as a rule, formal languages, the languages that are normally taken to

be the prime examples of compositional languages, fail to be compositional. He argues that languages can only be compositional if they do not contain variables.

Given the richness and diversity of philosophical logic, it is clear that the present special issue is bound to represent only a small fragment of the relevant ongoing research. Nevertheless, these papers give us some lively impressions of current directions and advances in this area.

Last but not least, we happily grasp the opportunity of acknowledging generous financial support of *Trends in Logic XI* by the Alexander von Humboldt Foundation, the Deutsche Vereinigung für Mathematische Logik und für Grundlagen der exakten Wissenschaften (DVMLG), and the Gesellschaft für Analytische Philosophie (GAP). Moreover, we would like to express our gratitude to Judith Hecker, Andrea Kruse, Lisa Dierksmeier, Ursula Kampmeier, and Tobias Koch for their assistance in organizing *Trends in Logic XI* at Ruhr-University Bochum and to the referees for their support.

March 2013

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