

THE SEMANTIC CONCEPTION OF LOGIC

This collection of new essays presents cutting-edge research on the semantic conception of logic, the invariance criteria of logicality, grammaticality, and logical truth. Contributors explore the history of the semantic tradition, starting with Tarski, and its historical applications, while central criticisms of the tradition, and especially the use of invariance criteria to explain logicality, are revisited by the original participants in that debate. Other essays discuss more recent criticism of the approach, and researchers from mathematics and linguistics weigh in on the role of the semantic tradition in their disciplines. This book will be invaluable to philosophers and logicians alike.

GIL SAGI is Lecturer in Philosophy at the University of Haifa, Israel. She has published several articles on logical consequence, the invariance criterion of logicality, and meaning in model-theoretic semantics.

JACK WOODS is University Academic Fellow in Mathematical Philosophy at the University of Leeds. He is the author of numerous articles and book chapters on logical consequence, the invariance criterion of logicality, and logical inferentialism.

Cambridge University Press
978-1-108-42254-3 — The Semantic Conception of Logic
Edited by Gil Sagi , Jack Woods
Frontmatter
[More Information](#)

THE SEMANTIC CONCEPTION OF LOGIC

Essays on Consequence, Invariance, and Meaning

EDITED BY

GIL SAGI

University of Haifa, Israel

JACK WOODS

University of Leeds



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-1-108-42254-3 — The Semantic Conception of Logic
Edited by Gil Sagi, Jack Woods
Frontmatter
[More Information](#)

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.
It furthers the University's mission by disseminating knowledge in the pursuit of
education, learning, and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781108422543
DOI: 10.1017/9781108524919

© Gil Sagi and Jack Woods 2021

This publication is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without the written
permission of Cambridge University Press.

First published 2021

A catalogue record for this publication is available from the British Library.

ISBN 978-1-108-42254-3 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of
URLs for external or third-party internet websites referred to in this publication
and does not guarantee that any content on such websites is, or will remain,
accurate or appropriate.

Contents

<i>List of Figures</i>	<i>page</i> vii
<i>List of Tables</i>	viii
<i>List of Contributors</i>	ix
<i>Acknowledgements</i>	x
The Semantic Conception of Logic: Problems and Prospects	I
<i>Gil Sagi and Jack Woods</i>	
PART I INVARIANCE CRITERIA FOR LOGICALITY	II
1 Invariance and Logicality in Perspective	13
<i>Gila Sher</i>	
2 The Problem of Logical Constants and the Semantic Tradition: From Invariantist Views to a Pragmatic Account	35
<i>Mario Gómez-Torrente</i>	
3 The Ways of Logicality: Invariance and Categoricity	55
<i>Denis Bonnay and Sebastian G.W. Speitel</i>	
4 Invariance without Extensionality	80
<i>Beau Madison Mount</i>	
5 There Might Be a Paradox of Logical Validity after All	97
<i>Roy T Cook</i>	
PART II CRITIQUES AND APPLICATIONS OF THE SEMANTIC APPROACH	II5
6 Semantic Perspectives in Logic	II7
<i>Johan van Benthem</i>	

vi	<i>Contents</i>	
7	Overgeneration in the Higher Infinite <i>Salvatore Florio and Luca Incurvati</i>	142
8	Propositional Logics of Truth by Logical Form <i>A.C. Paseau and Owen Griffiths</i>	160
9	Reinterpreting Logic <i>Alexandra Zinke</i>	186
	PART III LOGIC AND NATURAL LANGUAGE	207
10	Models, Model Theory, and Modeling <i>Michael Glanzberg</i>	209
11	On Being Trivial: Grammar vs. Logic <i>Gennaro Chierchia</i>	227
12	Grammaticality and Meaning Shift <i>Márta Abrusán, Nicholas Asher and Tim Van de Cruys</i>	249
	<i>Bibliography</i>	277
	<i>Index</i>	292

Figures

6.1	Diagram for the forward clause of bisimulation	<i>page</i> 127
8.1	Wide versus narrow readings	168

Tables

5.1	Consistency of variants of V_1	<i>page 102</i>
-----	----------------------------------	-----------------

Contributors

Márta Abrusán, Institut Jean Nicod, CNRS, ENS, EHESS, PSL Research University, Paris, France

Nicholas Asher, Institut de Recherche en Informatique de Toulouse, CNRS, Toulouse, France

Denis Bonnay, Université Paris Ouest Nanterre La Défense

Gennaro Chierchia, Harvard University

Roy T Cook, University of Minnesota

Salvatore Florio, University of Birmingham

Michael Glanzberg, Rutgers University

Mario Gómez-Torrente, Instituto de Investigaciones Filosóficas, Universidad Nacional Autónoma de México (UNAM)

Owen Griffiths, University of Cambridge

Luca Incurvati, ILLC, University of Amsterdam

Beau Madison Mount, University of Oxford

A.C. Paseau, University of Oxford

Gila Sher, University of California, San Diego

Sebastian G.W. Speitel, University of California, San Diego

Johan van Benthem, Stanford University, Tsinghua University and ILLC, University of Amsterdam

Tim Van de Cruys, Institut de Recherche en Informatique de Toulouse, CNRS, Toulouse, France

Alexandra Zinke, University of Tübingen

Acknowledgements

We'd like to thank the Munich Centre for Mathematical Philosophy and the Institut d'Études Cognitives at the École normale supérieure for providing generous funding for a conference where we workshopped most of these papers. We'd also like to thank the participants in that workshop and especially Hannes Leitgeb, Paolo Mancosu, and Lavinia Picollo for their helpful comments which substantially improved this volume. We'd like to thank Hilary Gaskin for her patience with us getting this volume into shape, and Bana Saadi for technical support.

Jack would like to also thank Bill Hanson and John Burgess for encouraging his interest in the subject of this volume and Gil for her patience while we brought it to fruition.

Gil would like to thank Ran Lanzet, David Kashtan, and Shaull Almagor for insightful discussions on the contents of this volume and Jack for making this happen.