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978-1-107-02091-7 - Formal Languages in Logic: A Philosophical and Cognitive Analysis

Catarina Dutilh Novaes

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FORMAL LANGUAGES IN LOGIC

Formal languages are widely regarded as being, above all, *mathematical objects*, and as producing a greater level of precision and technical complexity in logical investigations because of this. Yet defining formal languages exclusively in this way offers only a partial and limited explanation of the impact which their use (and the uses of formalisms more generally elsewhere) actually has. In this book, Catarina Dutilh Novaes adopts a much wider conception of formal languages so as to investigate more broadly what exactly is going on when theorists put these tools to use. She looks at the history and philosophy of formal languages, and focuses on the *cognitive* impact of formal languages on human reasoning, drawing on their historical development, psychology, cognitive science, and philosophy. Her wide-ranging study will be valuable for both students and researchers in philosophy, logic, psychology, and cognitive and computer science.

CATARINA DUTILH NOVAES is Assistant Professor at the Faculty of Philosophy of the University of Groningen, The Netherlands. She is the author of *Formalizing Medieval Logical Theories* (2007).

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CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9781107020917

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First published 2012

Printed in the United Kingdom at the University Press, Cambridge

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

Library of Congress Cataloguing in Publication data
Novaes, Catarina Dutilh.

Formal languages in logic : a philosophical and cognitive analysis / Catarina Dutilh Novaes.

p. cm.

ISBN 978-1-107-02091-7 (hardback)

1. Formal languages. 2. Reasoning. 3. Cognition. I. Title.

QA267.3.N68 2012

511.3-dc23

2012015483

ISBN 978-1-107-02091-7 Hardback

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Acknowledgements

This book was for the most part written during my period as a postdoctoral researcher at the Institute for Logic, Language and Computation (ILLC) in Amsterdam (2007–11), on a VENI grant from the Netherlands Foundation for Scientific Research (NWO). So, first and foremost, I would like to thank NWO for their generous support. Further, I want to thank my former colleagues at the ILLC, who provided such a fruitful environment for the development of this project, in particular: Benedikt Löwe, Chantal Bax, Dora Achourioti, Edgar Andrade-Lotero, Erik Rietvelt, Floris Roelofsen, Frank Veltman, Johan van Benthem, Katrin Schulz, Maria Aloni, Michiel van Lambalgen, Paul Dekker, Peter van Ormondt, Remko Scha, Sara Uckelman. Martin Stokhof deserves my deepest and eternal gratitude for his invaluable guidance and support as my ‘boss and mentor’ during this period. And thanks also to my new colleagues in Groningen, who gave me such a warm welcome in July 2011.

I would like to thank Hilary Gaskin and Anna Lowe at Cambridge University Press for their help at different editorial stages of the project, and Charles Stewart for his vital assistance at the final stages of preparation of the manuscript. Thanks also to the ETH-Zurich Library for granting me permission to use a page of the manuscript of Gentzen’s doctoral dissertation for the cover of the book. The page in question has a normalization proof that never made it to the printed version of the dissertation, thus remaining unknown until recently. The theorem was then independently proved thirty years later by Dag Prawitz, and constitutes one of the most fundamental results in proof theory. To me, this page is a beautiful illustration of the power of a suitable notation (in this case, natural deduction) to give rise to groundbreaking results.

In November 2011, the Department of Philosophy at Universidade Federal do Rio Grande do Sul in Porto Alegre (Brazil) hosted a prepublication, author-meets-critics event on the manuscript of this book. It was a real privilege to have my work carefully read by such sharp commentators

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Acknowledgements

while there was still time to make changes to the end result (the remaining shortcomings are of course my entire responsibility). I thank Alexandre N. Machado, Luis Carlos Pereira, Eros Carvalho, and Paulo Faria for their insightful comments, and Alfredo Storck and Lia Levy for organizing the event.

I am much indebted to colleagues around the world who in some way or another contributed to the writing process along the way, be it in the form of discussions or by commenting on previous drafts: Albrecht Heeffer, Andrew Fugard, Arianna Betti, Danielle Macbeth, David Over, Eric Schliesser, Frederico Dutilh Novaes, Graham Priest, Greg Restall, Hannes Leitgeb, Helen de Cruz, Jeff Ketland, Jeroen Bruggeman, Julien Murzi, Juliet Floyd, Juliette Kennedy, Keith Stenning (who provided detailed comments on the whole manuscript!), Marije Martijn, Markus Schlosser, Ole Hjortland, Rafael Nuñez, Richard Menary, Sebastian Sequoiah-Grayson, Shira Elqayam, Stephen Menn, Stephen Read, Stewart Shapiro, Thomas Müller, Wilfrid Hodges, Wilfried Sieg.

But, crucially, I want to thank Arianna, Dora, Greg, Jeroen, Seb, Stephen, and especially Edgar, Marije, and Ole also for their friendship and support over the years.

Many people ask me how I manage to combine an academic career with family life and children. Well, the short answer is, by relying on an extensive net of loving, dedicated allo-parents. I have been very fortunate to be able to count on the support of fantastic, caring people who have been involved in the rearing of my children over the years, at different times: their wonderful teachers at school, and at home, Camila, Irene, Rafa, Alice, Cris, Ana Célia. Within the family, my mother Maria, my brother Frederico, and Gê have been a constant presence, albeit from far away; my parents-in-law Arent and Denise are constantly involved in my children's lives – Denise must be the only mother-in-law in the world to have accompanied a daughter-in-law to an academic conference in order to care for the children. Without these fantastic allo-parents, this book would never have come into existence.

Sophie and Marie deserve thanks too, for filling my life with joy and trouble, laughter and worries, but most importantly with love. Children and books belong in the same category in that they project one's being out into the future (in the wise words of my friend Greg). But parenting is much harder than writing books, and I can only hope they will be proud of me both for my book-writing and for my parenting skills when they grow up.

But my final thanks should go to Reinout, my biggest fan and supporter. You make me feel like the most amazing person in the world; I could never thank you enough for this and so many other wonderful things.