Deontic Logic and Legal Systems

PABLO E. NAVARRO

Blaise Pascal University, Argentina National University of the South, Argentina

JORGE L. RODRÍGUEZ

National University of Mar del Plata, Argentina

With a Prologue by Eugenio Bulygin



... things are never odd in logic, only different.

P. T. Geach

... there is a good deal of unfinished business for analytical jurisprudence still to tackle, and this unfinished business includes a still much needed clarification of the meaning of the common assertion that laws belong to or constitute a system of laws...

H. L. A. Hart

CAMBRIDGE UNIVERSITY PRESS

32 Avenue of the Americas, New York, NY 10013-2473, USA

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/9780521139908

© Pablo E. Navarro and Jorge L. Rodríguez 2014

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 2014

Printed in the United States of America

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

Library of Congress Cataloging in Publication Data
Navarro, Pablo E., 1963–
Deontic logic and legal systems / Pablo E. Navarro, Jorge L. Rodriguez.
pages cm — (Cambridge introductions to philosophy and law)
ISBN 978-0-521-76739-2 (hardback) — ISBN 978-0-521-13990-8 (paperback)
I. Law — Methodology. — 2. Deontic logic. — 3. Law — Philosophy. — 4. Semantics (Philosophy)
I. Rodriguez, Jorge L., 1964— II. Title.
K213.N38 — 2014
340'.1511314 — dc23 — 2014011555
ISBN 978-0-521-76739-2 Hardback
ISBN 978-0-521-13990-8 Paperback

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

Contents

Prologue by Eugenio Bulygin		
face		xix
PAR	T I INTRODUCTION TO DEONTIC LOGIC	
The	Language of Logic and the Possibility of Deontic Logic	3
1.1	Validity, Truth, and Logical Form	3
1.2	The Language of Logic	3 8
1.3	Modal Logic and Deontic Logic	18
1.4	Main Systems of Deontic Logic	2 4
1.5	The Possibility of Deontic Logic	34
Para	adoxes and Shortcomings of Deontic Logic	39
2.1	Paradoxes of Deontic Logic	39
2.2	More Serious Challenges	44
2.3	Facing Jørgensen's Dilemma	50
2.4	Deontic Logic with or without Truth	61
2.5	Conceptions of Norms: Two Alternatives for	
	Deontic Logic	66
Nor	m-propositions, Conditional Norms, and Defeasibility	78
3.1	Logic of Norms and Logic of Norm-propositions	78
		•
	Norm-propositions	85
3.3	Conditional Norms	91
3.4	Factual and Deontic Detachment	97
3.5	Defeasibility and Deontic Logic	105
	PAR The 1.1 1.2 1.3 1.4 1.5 Para 2.1 2.2 2.3 2.4 2.5 Nor 3.1 3.2 3.3 3.4	PART I INTRODUCTION TO DEONTIC LOGIC The Language of Logic and the Possibility of Deontic Logic 1.1 Validity, Truth, and Logical Form 1.2 The Language of Logic 1.3 Modal Logic and Deontic Logic 1.4 Main Systems of Deontic Logic 1.5 The Possibility of Deontic Logic 2.1 Paradoxes and Shortcomings of Deontic Logic 2.2 More Serious Challenges 2.3 Facing Jørgensen's Dilemma 2.4 Deontic Logic with or without Truth 2.5 Conceptions of Norms: Two Alternatives for Deontic Logic Norm-propositions, Conditional Norms, and Defeasibility 3.1 Logic of Norms and Logic of Norm-propositions 3.2 An Apparent Dilemma for a Logic of Norm-propositions 3.3 Conditional Norms 3.4 Factual and Deontic Detachment

viii Contents

PART II	LOGIC	AND	LEGAL	SYSTEMS
---------	-------	-----	-------	----------------

4	Legal Systems and Legal Validity		
	4.1 Normative Systems and the Existence of Norms	117	
	4.2 Scope and Force of Legal Norms	125	
	4.3 Applicability and Validity	132	
	4.4 Applicable Systems and Hierarchical Orderings	136	
	4.5 Two Concepts of Legal Systems	143	
5	Legal Indeterminacy: Normative Gaps and Conflicts of		
	Norms	150	
	5.1 Formal Properties of Applicable Systems	150	
	5.2 The Problem of Legal Gaps	158	
	5.3 Normative Relevance and Axiological Gaps	166	
	5.4 Legal Conflicts and Coherence	175	
	5.5 Relevance, Conflicts, and Defeasibility of Legal		
	Norms	185	
6	Legal Dynamics		
	6.1 Momentary and Non-momentary Legal Systems	196	
	6.2 Promulgation and Derogation of Legal Norms	205	
	6.3 Two Approaches for Legal Dynamics	214	
	6.4 Logical Consequences and Legal Dynamics	223	
	6.5 Logical Consequences and Social Sources	232	
Еріі	ogue	241	
Bibliography			
Inde	x	257	