

Cambridge Elements

Elements in Philosophy and Logic

edited by

Bradley Armour-Garb

SUNY Albany

Frederick Kroon

The University of Auckland

LOGIC AND SCIENCE

*An Exploration of Logical
Anti-Exceptionalism*

Filippo Ferrari

University of Bologna

Massimiliano Carrara

University of Padua



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press & Assessment
978-1-009-54781-9 — Logic and Science
Filippo Ferrari, Massimiliano Carrara
Frontmatter
[More Information](#)



CAMBRIDGE
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, 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 Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009547819

DOI: 10.1017/9781009233897

© Filippo Ferrari and Massimiliano Carrara 2025

This publication is in copyright. Subject to statutory exception and to the provisions
of relevant collective licensing agreements, with the exception of the Creative
Commons version the link for which is provided below, no reproduction
of any part may take place without the written permission of Cambridge University
Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009233897 under
a Creative Commons Open Access license CC-BY-NC 4.0 which permits re-use,
distribution and reproduction in any medium for non-commercial purposes providing
appropriate credit to the original work is given and any changes made are indicated.
To view a copy of this license visit <https://creativecommons.org/licenses/by-nc/4.0>

When citing this work, please include a reference to the DOI 10.1017/9781009233897

First published 2025

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

ISBN 978-1-009-54781-9 Hardback

ISBN 978-1-009-23390-3 Paperback

ISSN 2516-418X (online)

ISSN 2516-4171 (print)

Cambridge University Press & Assessment 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.

For EU product safety concerns, contact us at Calle de José Abascal, 56, 1º, 28003
Madrid, Spain, or email eugpsr@cambridge.org

Logic and Science

An Exploration of Logical Anti-Exceptionalism

Elements in Philosophy and Logic

DOI: 10.1017/9781009233897
First published online: April 2025

Filippo Ferrari
University of Bologna

Massimiliano Carrara
University of Padua

Author for correspondence: Filippo Ferrari, f.q.ferrari@gmail.com

Abstract: This Element delves into the relationship between logic and the sciences, a topic brought to prominence by Quine, who regarded logic as methodologically and epistemologically akin to the sciences. For this reason, Quine is seen as the forefather of anti-exceptionalism about logic (AEL), a stance that has become prevalent in the philosophy of logic today. Despite its popularity and the volume of research it inspires, some core issues still lack clarity. For one thing, most works in the debate remain vague on what should count as logic and what should count as a science. Furthermore, the terms of the comparison are rarely specified and discussed in a systematic way. This Element purports to advance the debate on these crucial issues with the hope of fostering our understanding of the fundamentals of AEL. This title is also available as Open Access on Cambridge Core.

Keywords: logic, science, logical anti-exceptionalism, philosophy of logic, demarcation problem in science and logic

© Filippo Ferrari and Massimiliano Carrara 2025

ISBNs: 9781009547819 (HB), 9781009233903 (PB), 9781009233897 (OC)
ISSNs: 2516-418X (online), 2516-4171 (print)

Contents

Introduction	1
1 On Full-Blooded Exceptionalism	2
2 Quine’s Philosophy of Logic	18
3 Demarcation in Science	26
4 Demarcation in Logic	36
5 Logic and Science: A Multicriteria Approach	47
Conclusions	63
References	68