

Cambridge Elements

Elements in the Philosophy of Biology

edited by
Grant Ramsey
KU Leuven
Michael Ruse
Florida State University

FACTS, CONVENTIONS, AND THE LEVELS OF SELECTION

Pierrick Bourrat
Macquarie University



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-1-009-09829-8 — Facts, Conventions, and the Levels of Selection
Pierrick Bourrat
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/9781009098298
DOI: 10.1017/9781108885812

© Pierrick Bourrat 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 978-1-009-09829-8 Hardback
ISBN 978-1-108-79458-9 Paperback

ISSN 2515-1126 (online)
ISSN 2515-1118 (print)

Additional resources for this publication at www.cambridge.org/bourrat.

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.

Facts, Conventions, and the Levels of Selection

Elements in the Philosophy of Biology

DOI: 10.1017/9781108885812
First published online: August 2021

Pierrick Bourrat
Macquarie University

Author for correspondence: Pierrick Bourrat, p.bourrat@gmail.com

Abstract: Debates concerning the units and levels of selection have persisted for over fifty years. One major question in this literature is whether units and levels of selection are genuine, in the sense that they are objective features of the world, or merely reflect the interests and goals of an observer. Scientists and philosophers have proposed a range of answers to this question. This Element introduces this literature and proposes a novel contribution. It defends a realist stance and offers a way of delineating genuine levels of selection by invoking the notion of a functional unit.

Keywords: natural selection, Price equation, conventionalism, levels of selection, units of selection

© Pierrick Bourrat 2021

ISBNs: 9781009098298 (HB), 9781108794589 (PB), 9781108885812 (OC)
ISSNs: 2515-1126 (online), 2515-1118 (print)

Contents

1	Introduction	1
2	The Problem of Conventionalism	4
3	Existing Approaches to Levels of Selection and Their Limitations	17
4	Functional Units as Units of Selection	32
5	Levels of Selection and Collective-Level Multiplication	53
6	Conclusion	76
	Bibliography	80

An online appendix is available at www.cambridge.org/bourrat.