

# Cambridge Elements =

Elements in Ancient Philosophy
edited by
James Warren
University of Cambridge

## RELATIVE CHANGE

Matthew Duncombe University of Nottingham





## **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

79 Anson Road, #06-04/06, Singapore 079906

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/9781108713429 DOI: 10.1017/9781108581660

© Matthew Duncombe 2020

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 2020

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

ISBN 978-1-108-71342-9 Paperback ISSN 2631-4118 (online) ISSN 2631-410X (print)

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.



### **Relative Change**

Elements in Ancient Philosophy

DOI: 10.1017/9781108581660 First published online: September 2020

> Matthew Duncombe University of Nottingham

Author for correspondence: matthew.duncombe@nottingham.ac.uk

Abstract: A relative change occurs when some item changes a relation. This Element examines how Plato, Aristotle, Stoics, and Sextus Empiricus approached relative change. Relative change is puzzling because the following three propositions each seem true but cannot be true together: (1) no relative changes are intrinsic changes; (2) only intrinsic changes are proper changes; (3) some relative changes are proper changes. Plato's *Theaetetus* and *Phaedo* discuss relative change. I argue that these dialogues assume relative changes to be intrinsic changes, so they deny (1). Aristotle responds differently, by denying (3) that relative change is proper change. The Stoics claimed that some non-intrinsic changes are changes, denying (2). Finally, I discuss Sextus' argument that relative change shows that there are no relatives at all.

Keywords: Plato, Aristotle, Stoics, Sextus Empiricus, relative change

© Matthew Duncombe 2020

ISBNs: 9781108713429 (PB), 9781108581660 (OC) ISSNs: 2631-4118 (online), 2631-410X (print)



#### **Contents**

1	Introduction	1
2	Plato	5
3	Aristotle	23
4	Stoics and Sceptics	44
5	Conclusion	57
	References	60