THE CONCEPT OF MOTION
IN ANCIENT GREEK THOUGHT

This book examines the birth of the scientific understanding of motion. It investigates which logical tools and methodological principles had to be in place to give a consistent account of motion, and which mathematical notions were introduced to gain control over conceptual problems of motion. It shows how the idea of motion raised two fundamental problems in the fifth and fourth century BCE: bringing together Being and non-Being, and bringing together time and space. The first problem leads to the exclusion of motion from the realm of rational investigation in Parmenides, the second to Zeno’s paradoxes of motion. Methodological and logical developments reacting to these puzzles are shown to be present implicitly in the atomists, and explicitly in Plato, who also employs mathematical structures to make motion intelligible. With Aristotle we finally see the first outline of the fundamental framework with which we conceptualise motion today.

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THOUGHT

Foundations in Logic, Method, and Mathematics

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² Section 1.3.2.1.1 in Chapter 1 and parts of chapter 2 overlap with Sattler 2011; section 3.6.4 in Chapter 3 with Sattler 2015 and a subsection of 3.6.1 with Sattler 2019b; section 7.2.1 in Chapter 7 with Sattler 2019a; and sections 1.4.2 in Chapter 1 and 8.1 and 8.2.3 in Chapter 8 with Sattler 2017a.
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