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are not so successful, it is less because of sloppy analysis, and more due to a failure clearly to articulate the import of their examinations (which is not to say that such import is lacking).

One issue with the volume regards a certain uniformity of subject matter. The editors acknowledge that the spread of topics is uneven: eight of the 13 chapters concern Plato, with one variously concerning the Presocratics (Heraclitus), Aristotle, Stoicism, Aristotelianism (Alexander of Aphrodisias) and Neoplatonism (Plotinus). Given the aims of the volume, an emphasis on Plato is perhaps expected; Plato is *the* sacred cow of ancient philosophy, for ancient and contemporary commentators alike. If Plato rewards fresh reading, then any ancient figure of substance can, but this is something the volume establishes more by inference than demonstration. While this concentration does not undermine the aims of the volume, it assumes the character of 'essential reading' only in Plato scholarship.

Despite these (relatively minor) issues, I rate this volume to be a genuine and tremendous success. It makes a powerful case that ancient philosophy will always be a *living* discipline.

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GREGORY (A.) Early Greek Philosophies of Nature. London, Bloomsbury, 2020. Pp. vii + 241. £90. 9781350080973.

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Andrew Gregory has completed a long journey as an historian of science, from his book on Harvey (Harvey's Heart: The Discovery of Blood Circulation (London 2000)) to his several important books on ancient philosophy and science. The present volume somehow circles back by claiming that it is wrong, when we study ancient science, to seek for seventeenth-centurystyle mechanist clockwork analogies. As Gregory puts it, in his view, 'we cannot "retrofit" a mechanics' (188) on ancient science, any more than we should on Harvey. This general claim opens the way for a fruitful approach to early Greek philosophies of nature, that is, to all sorts of endeavours aiming 'to understand order and regularity in this period', from Homer and Hesiod down to the Hippocratic authors (1). Turning his back to the 'Greek Enlightenment' or 'myth to reason' models, Gregory develops a 'transfer thesis' (38), based on an intuition from Werner Jaeger (32), according to which qualities and actions attributed to the gods by early poetry were transferred to the principles of Ionian philosophy, to act as key concepts of the new immanent world order, directly accessible to human research and enquiry. This general epistemological shift is the specific focus of two independent chapters. How and when was the necessity to appeal to gods and Muses for knowledge challenged by a new ideal of thorough examination, namely of historia ('enquiry', chapter 3)? Chapter 5 introduces the 'targeting thesis' (94), according to which Ionian philosophy aimed at providing new explanations for the phenomena that were especially known as a field of gods' intervention, typically meteorological phenomena.

In chapter 2, Gregory explores the way in which Homer and Hesiod express how gods 'guide' (ithunein) the stuff they control, or how the world is ruled by a 'powerful fate' (krataiē moira), that sets everything kata moiran, kata aisan and kata kosmon ('according to what is proper', 'in good order'). He offers a balanced discussion of the type of 'law' that moira imposes on the gods themselves while allowing them to somehow play with it. How then did the kata moiran order turns into a kata phusin ('according to nature') one, with an intermediate stage in Anaximander's kata to chreon ('according to necessity')? Gregory sees this 'transfer' taking shape through two traditions, sometimes intertwined in some authors, nevertheless distinct in the type of analogies they support: the kubernan tradition of 'steered' cosmic order develops from Anaximander down to Heraclitus, Parmenides, Diogenes of

Apollonia, Plato and Aristotle; the *kratein* tradition of the 'dominating' element stems from Anaximenes down to Xenophanes, Heraclitus, Parmenides, Empedocles, Anaxagoras, Democritus and the Derveni Papyrus (respectively chapter 4 and 6).

Gregory describes steering as a continuous, thoroughgoing process led by an intelligent entity, but he asks more precisely if we should imagine that Anaximander's apeiron ('boundless') steers like the ships of the Phaeacians, which know the minds of men and find their own way, or as a seed steers the growth of a plant (73–74). Gregory has favoured the latter interpretation in his previous accounts of Anaximander, but he now wants to bring new light on the former from a fresh reading of Plato, Homer, Pindar and Bacchylides, notably insisting on the dimension of safety and of a 'duty of care' involved in steering (82). It seems important to Gregory to reject the mechanistic idea that Anaximander might have imagined a plurality of worlds, either synchronic or diachronic, or used vortices, chance and the like-to-like principle. But he also endeavours to show that vortices, when used in the kratein tradition, in Anaxagoras for instance, do not necessarily entail a mechanistic view (132-35). A refined view emerges, according to which analogies from art, tools and machines, from Anaximander's wheel analogy (89-90) to Anaximenes' analogies from felting, cooking or maritime activities (118-20), need not be described as mechanical. The reason is that ancient machines did not provide a strong enough model to overtake all other analogies (112) and therefore did not lead to thinking of processes such as vortices as completely autonomous. In chapter 7, Gregory indeed attempts to show that the use of vortices and the like-to-like principle in the early atomists, if they are anti-teleological and target the kubernan and kratein traditions for this reason, does not lead to a mechanistic view either, because such models remain entangled in a network of various analogies, whether meteorological, biological, human, agricultural or maritime. As probably the most important result of this book, Gregory offers pluralism in the use of analogies as a key characteristic of early philosophies 'of nature', and as their distinct specific value for the historian of science.

The Hippocratic authors (chapter 8) offer a nice conclusion to this syncretic history, as Gregory finds in them the intersection of the kubernan and kratein traditions, together with the idea that knowledge is the knowledge of the phusis of things (for instance of diseases) and of how they behave kata phusin. As we reach this conclusion, we might wonder if, as Gregory has claimed at various points of his progression, the problem with Homer and Hesiod is that they had no conception of phusis (for instance, 67). If one means by phusis a notion of a global 'nature' with its regularities, one might ask if even Plato had such a conception. But if one means the examination of individual 'natures', then one might suggest that there could be more continuity than expected between the fifth-century enquiry into phusis and the single use of phusis in Homer (Od. 10.303), which, according to Gregory, designates the 'form, use and property' of the moly, a plant used by Odysseus to become immune to Circe's drugs (31). Gregory also claims that Circe is not a 'witch', because she does not do anything supernatural, and only uses her powers and knowledge of the nature of things. Maybe the gods did have a conception of phusis, as a sense of the compelling reality of things that they had to know and according to which they had to act - maybe philosophy transferred that too.

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