

EDITED BY MALCOLM SCHOFIELD

# Aristotle, Plato and Pythagoreanism in the First Century BC

*New Directions for Philosophy*



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CAMBRIDGE  
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS  
Cambridge, New York, Melbourne, Madrid, Cape Town,  
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press  
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org  
Information on this title: www.cambridge.org/9781107020115

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First published 2013

Printed and bound in the United Kingdom by at the MPG Books Group

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

*Library of Congress Cataloguing in Publication data*

Aristotle, Plato and Pythagoreanism in the first century BC : new directions for philosophy /  
edited by Malcolm Schofield.

pages cm

Includes bibliographical references and index.

ISBN 978-1-107-02011-5

1. Philosophy, Ancient. 2. Aristotle. 3. Plato. I. Schofield, Malcolm, editor of compilation.

B171.A75 2013

180 – dc23 2012025993

ISBN 978-1-107-02011-5 Hardback

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## ARISTOTLE, PLATO AND PYTHAGOREANISM IN THE FIRST CENTURY BC

This book presents an up-to-date overview of the main new directions taken by ancient philosophy in the first century BC, a period in which the dominance exercised in the Hellenistic age by Stoicism, Epicureanism and Academic scepticism gave way to a more diverse and experimental philosophical scene. Its development has been much less well understood, but here a strong international team of leading scholars of the subject reconstruct key features of the changed environment. They examine afresh the evidence for some of the central Greek thinkers of the period, as well as illuminating Cicero's engagement with Plato both as translator and in his own philosophising. The intensity of renewed study of Aristotle's *Categories* and Plato's *Timaeus* is an especially striking outcome of their discussions. The volume will be indispensable for scholars and students interested in the history of Platonism and Aristotelianism.

MALCOLM SCHOFIELD is Emeritus Professor of Ancient Philosophy, University of Cambridge, and Fellow of St John's College, Cambridge. He is co-author (with G. S. Kirk and J. E. Raven) of the second edition of *The Presocratic Philosophers* (1983) and co-editor (with Keimpe Algra, Jonathan Barnes, and Jaap Mansfeld) of *The Cambridge History of Hellenistic Philosophy* (1999). His other publications include *An Essay on Anaxagoras* (1980), *The Stoic Idea of the City* (1991; 2nd edition, 1999), and *Plato: Political Philosophy* (2006).

*In memoriam*  
*Anna Eunyoung Ju and Bob Sharples*

## *Notes on contributors*

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MYRTO HATZIMICHALI was a post-doctoral researcher on the University of Cambridge AHRC-funded project on philosophy in the first century BC, where she was a Fellow of Girton College. After subsequent positions at University College London and the University of Exeter, she is now University Lecturer in Classics at Cambridge, and a Fellow of Homerton College. Her research interests centre on intellectual and cultural history, especially on the ways in which literary and philosophical texts were transmitted, received and professionally studied in the Hellenistic and Early Imperial periods. She is the author of *Potamo of Alexandria and the Emergence of Eclecticism in Late Hellenistic Philosophy* (Cambridge 2011), and has contributed chapters to volumes on the philosopher Antiochus of Ascalon, on Ancient Libraries and on Hellenistic poetry.

ANNA EUNYOUNG JU pursued her studies for the PhD in the Faculty of Classics, University of Cambridge, where her dissertation was entitled *Posidonius on the Stoic scala naturae* (2008). She then took up a research fellowship at the Jungam Academy for Greco-Roman Studies. She died in March 2010.

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ROBERTO POLITO was a post-doctoral researcher on the University of Cambridge AHRC-funded project on philosophy in the first century BC, where he was a Fellow of Wolfson College. Subsequently he held a further post-doctoral position at the Humboldt University, Berlin, with its project on ancient medicine and philosophy. He is the author of *The Sceptical Road* (2004). His edition of the fragments of Aenesidemus is forthcoming from Cambridge University Press.

MARWAN RASHED is Professor at the École normale supérieure, Paris, where he teaches history of Greek and Arabic philosophy. Among his recent books are: *Aristote: De la génération et la corruption, édition, traduction et commentaire* (2005); *L'héritage aristotélicien: textes inédits de l'Antiquité*

(Paris 2007); *Alexandre d'Aphrodise, Commentaire perdu sur la Physique d'Aristote (Livres IV–VIII): Les scholies byzantines* (2011). He is currently writing a commentary on Plato's *Timaeus*.

MALCOLM SCHOFIELD retired in September 2011 after teaching in the Faculty of Classics, University of Cambridge, for nearly forty years. He continues as a Fellow of St John's College. He was co-editor (with Keimpe Algra, Jonathan Barnes and Jaap Mansfeld) of *The Cambridge History of Hellenistic Philosophy* (Cambridge 1999), and was co-director of the AHRC-funded project on philosophy in the first century BC. He is currently working mostly on Cicero.

DAVID SEDLEY was director of the AHRC-funded project on philosophy in the first century BC. He is Laurence Professor of Ancient Philosophy at the University of Cambridge, and a Fellow of Christ's College. He has been editor of *Classical Quarterly* (1986–1992) and *Oxford Studies in Ancient Philosophy* (1998–2007). His recent publications include: *Plato's Cratylus* (Cambridge 2003), *The Midwife of Platonism: Text and Subtext in Plato's Theaetetus* (2004), *Creationism and its Critics in Antiquity* (2007), and (as editor) *The Philosophy of Antiochus* (Cambridge 2012), sister volume to the present one.



## *Preface*

This volume represents the proceedings of an international conference held in Cambridge on 13–16 July 2009. It was the second such event organised in the context of a project on philosophy in the first century BC, which ran for the period 2005–9 with funding by the UK's Arts and Humanities Research Council (AHRC). It is the second such volume to be produced. An account of the project and its work can be found in the acknowledgements section prefacing its predecessor volume, *The Philosophy of Antiochus*, edited by David Sedley (Cambridge University Press, 2012). We are grateful to the AHRC for all the support that made the July 2009 gathering possible, and we thank also the Faculty of Classics in the University of Cambridge, which as well as accommodating the project team throughout made additional financial support available on that occasion. Myrto Hatzimichali and Roberto Polito, research associates with the project, and Georgia Tsouni, PhD student supported to work with the team, took responsibility for many of the nuts and bolts of the running of the conference; we thank them warmly. The development and implementation of its academic programming were undertaken principally by David Sedley, as project director. The vision that launched the project, the energy that sustained it, and the decision to devote the second of the project's two conferences to the subject explored in the pages that follow were largely his, and though the rest of us made our input, I know that the rest of the team would wish to join me in expressing our deep gratitude for his initiative and support – and for fostering the collegial spirit in which every aspect of the work of the project was approached and undertaken.

This preface must, however, end on a note of sadness. We have to record the deaths of two of the speakers at the conference: Anna Eunyoung Ju, who died at the start of her career in March 2010, and Bob Sharples, who died after many productive decades of distinguished work, particularly on the Aristotelian tradition, in August 2010. Anna had revised her conference

paper and had submitted her chapter for this volume by the end of 2009; happily, it is now published here. Bob's paper – on Peripatetic ethics – would have added an extra dimension to the coverage of Aristotelianism in our period, but he was never to convert it into a book chapter. Both were people of unforgettable integrity. All the contributors mourn their loss. We dedicate the book to their memory.

MS, January 2012

## *Introduction*

*Malcolm Schofield*

The first century BC was a time of new directions in philosophy. The previous two centuries had been dominated by Stoicism, Epicureanism and Academic scepticism, and by the Athenian philosophical schools that fostered them. Now came a change. Particularly after the Roman dictator Sulla's depredations of 88 BC, Athens lost its pre-eminence, and leading philosophers worked in other centres: Rhodes (associated particularly with the Stoics Panaetius and Posidonius), Pergamum, Herculaneum (with its famous Epicurean community and still more famous library) are venues that come to mind, and above all Alexandria and Rome. There were still Stoics and Epicureans and Academics. But what being a Stoic or an Academic amounted to was becoming increasingly controversial. The surviving evidence often leaves room for doubt about how various figures whom later tradition took to be important would have wished to position themselves relative to school labels – here not forgetting the Peripatos, since Aristotle and Aristotelianism now start to loom larger in the historical record than they had done since the time of Theophrastus. Plato for his part had never fallen off philosophers' reading lists, but the pace of attempts to appropriate versions of Platonism or otherwise engage with Plato also quickened.

This volume brings together a collection of papers by scholars who have been trying to open up knowledge and understanding of the philosophy of this period. As indicated in the Preface, all were delivered in their original form at the final conference of the Cambridge Faculty of Classics' AHRC project on philosophy in the first century BC. The focus was on the reception of Plato and Aristotle – and Pythagoreanism, too, although as will become evident, the Pythagoreanism we shall mostly be encountering is intimately tied to readings of Plato that emphasise his Pythagorising and mathematicising inspiration. One striking development particularly apparent in the first century is a fresh philosophical interest in the actual texts of Plato and Aristotle alike, something whose impact is registered more

or less explicitly in most of the contributions to the volume. Whether in Aristotle's case this coincided with a new availability of copies of school treatises by him that had long disappeared from general view remains a matter for debate.

It is discussed in Myrto Hatzimichali's opening chapter, which re-examines the evidence for early editorial activity on the writings of both Plato and Aristotle. She distinguishes sharply the situation with Plato, whose texts had been studied throughout the Hellenistic period, from that obtaining for Aristotle, where she concludes that even if copies of the treatises were not altogether lost at that time, they were not much studied. She distinguishes also between text-critical and similar editorial initiatives on the one hand, for which there is evidence both before (in Plato's case) and during the first century (for Aristotle too), and attempts on the other to organize both the Platonic and Aristotelian corpora. She agrees with Jonathan Barnes that there is no basis for attributing the former kind of activity to Andronicus of Rhodes, often wrongly typecast as Aristotle's first 'editor'. But she is emphatic that Andronicus' pronouncements on the nature of Aristotle's writings, particularly as concerns authenticity, book-division, and grouping and ordering of school treatises, were decisive in bringing order out of something like chaos, and transforming subsequent approaches to Aristotle – not least in bringing about the eclipse of all the more popular works that he had made widely available in his own lifetime.

Stoicised presentations of Aristotelianism, which show little sign of close attention to Aristotle's own writings, had been characteristic of the Hellenistic period. These continued to appear, e.g. in the writings of the Academic Antiochus and later of Arius Didymus. Other first-century philosophers, however, began to read and debate Aristotle's actual texts, in what Riccardo Chiaradonna dubs 'post-Hellenistic' mode: physical treatises such as *de Caelo* and the *Physics* itself, the *Nicomachean Ethics*, but above all the work we know as the *Categories*. Among them were Stoics and Academics, as well as Aristotelians – though in calling them that we should not imagine a Peripatetic orthodoxy: Aristotle seems to have been regarded by them as a great thinker, but Aristotelians did not always find him consistent, and they thought he sometimes got things wrong. This varied Aristotelian terrain is surveyed and examined in Chapters 2, 3 and 4.

In Chapter 2 Chiaradonna looks first at Antiochus, then Aristo and Cratippus, and finally Eudorus. His consideration of the evidence for Antiochus, first in the sphere of ethics and then of epistemology, leads to the conclusion that 'his way of reading Aristotle' – if we assume he did read some actual Aristotle – 'definitely did not focus on close textual

interpretation of the treatises'. Chiaradonna contrasts in particular the treatment of the Peripatetic 'double criterion' of knowledge (the school was taken to acknowledge both sense-perception and thought as windows on truth) in Sextus Empiricus, which must rely on a source other than Aristotle's text, conceivably Antiochus, and in Porphyry, where the 'Aristotelian exegetical background of [his] account is very evident'. With Antiochus' pupils Cratippus and Aristo he finds an interesting divergence. Whereas 'what we know of Cratippus... shows no similarity with the technical exegetical works of the early commentators', Aristo 'was certainly engaged in a detailed interpretation of Aristotle's school treatises', notably the *Categories*. Eudorus, too, seems to have focused in his engagement with Aristotle on the interpretation of particular passages in the treatises, including once again the *Categories*, where we are told that he proposed *aporiai* and objections to specific aspects of Aristotle's theories of quality and of relatives: probably not in the spirit of total rejection, but rather with the aim of revising 'some details of Aristotle's views in order to integrate them in his overall Platonic-Pythagorean project' (see further Bonazzi's discussion in Chapter 8). With Boethus also grappling in this period with the text of the *Categories*, it might look as though a decisive shift of focus had taken place. But Chiaradonna notes that the swell of interest in the school treatises evidenced for the first century BC appears to have abated in the decades that followed, not regaining impetus until the second century AD.

So far the volume has been engaged in history of philosophy. Those who relish philosophical argument for itself, as it may be prompted by problems in the text of Aristotle, will find intriguing material in Chapters 3 and 4 (by Marwan Rashed and Andrea Falcon), excavated from the evidence for Boethus and Xenarchus respectively, two especially interesting, independent and original Aristotelian philosophers of our period. In Chapter 3 Rashed explores Boethus' *Categories*-based doctrine, radical in its implications, of the primacy of individual material substance. He shows how Boethus then grapples with the relation of form to matter if (as he claimed) substance is the composite of the two, and with the related problem of what ontological status form can then be supposed to have. This takes him into the way Boethus tackled the 'in' relation, apparently in light of the chapter on 'in' in Book 4 of the *Physics* and of consequential reflection on how the category of 'having' (with complications about its relation to the category of the 'relative') is to be understood. He then looks at some passages in which Alexander two centuries or more later seeks with no less ingenuity to defend the substantiality of form against an alternative Aristotelian view of it (which, he argues, can only be Boethus'), and how

Alexander requires in the end 'a non-canonical . . . scheme of predication, according to which the form is the subject and the matter what the form needs to have in order for it to exist as a form'. Finally, Rashed considers further ramifications of Boethus' own position. He asks what principle of individuation Boethus could have opted for if he is to delimit this man, or this horse, non-arbitrarily as *a* subject. Rashed suggests that he avoided specifying what form actually was, speaking of its categorical status in a way that at any rate leaves it without any strong role to play in individuation; and – on the basis of Boethus' attack on the Stoic doctrine of relatives – that 'he worked with a very relaxed notion of what it is to be an object, which permitted him to bypass the difficulty of having his subjects not substantially constituted by their forms'. 'Boethus' whole enterprise', he concludes, 'amounted to curtailing the ontological realm as far as he could . . . using the tools of Aristotle's *Categories* alone.'

Xenarchus has often been seen as a dissenting voice within the Peripatetic tradition – *die innere Opposition*, in Paul Moraux's phrase – on the basis of his critique, reported by Simplicius, of Aristotle's thesis that the heavens are made of a special simple body, unique to them: the fifth body, the fifth element, *quinta essentia*, identified as aether. Exploiting evidence of Xenarchus' philosophical efforts in ethics as well as the physics and mathematics of motion, Falcon in Chapter 4 argues that that interpretation rests on an unproven and unlikely premise: the assumption that in the first century BC there already was an Aristotelian orthodoxy – and a consensus that the right way to be an Aristotelian was to expound a version of what one took Aristotle to be saying, rather than to try and improve on him while still accepting the broad outlines of his approach to philosophical understanding. In developing the case for seeing Xenarchus as undertaking a project in this alternative spirit, Falcon devotes most of the chapter to his critique of the theory of simple linear and circular motions worked out in *de Caelo*, and to the positive doctrine of natural motion he seems to have wanted to put in its place. More specifically, after reporting on the whole battery of objections levelled against Aristotle's claims about the natural motions of physical bodies, he exploits Xenarchus' distinction between *being* a simple body and *becoming* a simple body to suggest that for him fire accordingly only really is fire when it has reached its natural place – and does not then lose its mobility, but manifests it in a different and more perfect form, namely circular motion. From a passage in Julian, Falcon goes on to extract the further positive claim that the celestial body moving in a circle is the cause of the union of matter and form in hylomorphic compounds. The overall upshot is that there is no need for a fifth element to account for

the nature and movement of the heavenly bodies, nor for the consequential generative processes in the sublunary world: celestial fire will suffice. As for ethics, Falcon points to Xenarchus' and Boethus' rewriting of Aristotle's claims about self-love in terms of the Hellenistic notion of the *prôton oikeion*, 'the first object that is appropriate', i.e. to natural desire: once again, engaging closely with his text, and this time sticking fairly closely to Aristotelian doctrine – but improving upon it.

As our chapters on the reception of Aristotle attest the prominence of the *Categories* in the first century BC, so many of the chapters in the volume devoted to Plato and Pythagoreanism are also preoccupied to a greater or lesser extent with the interpretation of one particular text: in this case the *Timaeus*. The Stoic Posidonius' interest in Plato's tripartite psychology is well known. Anna Ju in Chapter 5 considers the less familiar comments, hard to construe, that Posidonius made about the *Timaeus*' account of the ontological status of the soul. She rejects the commonly held view that Plutarch, on whom we rely here, provides evidence for Posidonius' deviation from a standard Stoic conception of soul, and at the same time illustrates his evolution into a Platonist or at least an ally of Platonists in taking 'divisible being' as matter, and in turn as a corporeal constituent of the world soul. This would require the presumption that he took the soul as described by Plato to be in some degree corporeal: which 'seems just implausible'. One thing she thinks will have attracted him to the *Timaeus* passage is its talk of 'divisible being coming to be in relation to bodies' (*Tim.* 35a), where she suspects the connotations of the preposition used here (*περὶ τὰ σώματα*) might have suggested that Plato had in mind the surface *round* a body, and that so far from supposing that Plato construed this limit as corporeal, he will have seen the text as congruent with what was probably his own view, that limits are incorporeal – without surrendering general commitment to Stoic materialism.

Posidonius evidently went on to offer some form of mathematical or mathematicising explanation for the Platonic soul, as intermediate between the intelligible and the sensible. A key point here is that for him the dialogue was essentially a Pythagorean text. There is evidence that he was particularly interested in mathematical cognition: not only does preoccupation with the logic of mathematics bulk quite large in the evidence, but he speaks in a Pythagorising vein of limits, hebdomads, and the even and the odd, drawing on these in accounts of the formation of surfaces, arctic circles, the tides, and time marked by the lunar orbit (Fr. 291, seemingly part of a comment on the *Timaeus*). And Ju points to the disproportionate length of the Pythagorean section in Sextus Empiricus' treatment of the criterion of

truth (*M* 7. 92–109), where like other scholars (but not A. A. Long: cf. pp. 144–5 below) she sees Posidonius as the likely source. In stressing the importance of reason in Stoic epistemology, Ju argues, Posidonius probably claimed a pedigree in the Pythagorean mathematising interpretation of reason he took to be shaping the *Timaeus* account of the soul, without thereby committing himself to a doctrine of its incorporeality. Although he apparently accepted that such a heritage framed the questions which it was natural for his own thought to pursue, his history-rewriting was ultimately undertaken as part of a Stoic project in at least selective appropriation – not unlike earlier Stoic theorising: one thinks for example of Cleanthes' use of Heraclitus in his *Hymn to Zeus*.

Chapter 6 turns to the medical theorist Asclepiades, who originated in Bithynia, although his career also took him for a period to Rome. Roberto Polito examines his elusive doctrine of 'jointless masses', an idea he seems expressly to have appropriated from Heraclides Ponticus, a candidate for the succession to the headship of the Academy at the death of Speusippus in 339 BC, and a writer of Pythagorean tendency who hailed from the same part of the world as himself. Why a thinker like Asclepiades, who emerges from the evidence as a theorist committed to solely materialist explanations, should attempt to rework a concept invented by a philosopher of quite different cast of mind, for whom the immortality of the soul seems to have been an important tenet, has always been found rather mystifying. Polito reviews some of the answers to the puzzle so far offered in the scholarly literature, and points out the difficulties in I. M. Lonie's views on the matter in particular. He thinks Lonie right, however, in pointing to Plato's *Timaeus* as a source of inspiration for Heraclides. He argues that Heraclides' 'jointless masses', probably a doctrine placed in the mouth of Empedocles in one of his philosophical dialogues, were very likely conceived as indivisible geometrical magnitudes such as were posited by Platonists of that same era (the latter part of the fourth century BC), echoing what they took to be the geometrical atomism of the *Timaeus*. And his conclusion is that Asclepiades' appropriation of the idea of 'jointless masses' must be seen not as homage to Heraclides, but rather as a challenge to Platonist modes of explanation as represented in the thought of one of their most prominent early exponents. He will have been deliberately substituting material for geometrical particles, just as in the medical sphere he gave mechanistic causes for the sorts of 'miraculous' recoveries for which Heraclides had invoked supernatural explanations.

The *Timaeus* has been seen in some previous scholarship, notably by A. -J. Festugière, as an important model for the *Pythagorean Commentaries*



of the polymath antiquarian Alexander Polyhistor, a work no less puzzling in its way than Asclepiades' theory of 'jointless masses'. It is the subject of A. A. Long's study in Chapter 7, which offers the reader *inter alia* an exercise in literary detection. While not denying exploitation of the *Timaeus*, Long finds also an extraordinary range of Presocratic, medical and Stoic ingredients – as well as other Platonist ones – in what he takes to be a learned scholarly concoction of our period, comparable in some ways (but not, for example, in its use of Attic rather than Doric dialect, nor in the variety of sources on which it draws) with the pseudonymous treatises that were attributed to early Pythagoreans, bearing little relation to any living Pythagorean tradition, and making no discernible impact on contemporaneous philosophy at Rome, where Alexander spent his mature years (c.80–60 BC). Just because the *Pythagorean Commentaries* stands apart from the rest of surviving 'Pythagorean' literature, it is 'of exceptional interest', as Diogenes Laërtius evidently judged in making it the doctrinal core of his entire account of Pythagoreanism in Book 8 of his *Lives of the Philosophers*.

The opening of the doxography which the *Commentaries* constitute sets out first principles – a Monad, which then acts upon an Indefinite Dyad as its matter, from which in turn are generated numbers and other mathematical entities, and in the end the entire created universe (at this point echoes of the *Timaeus* are indeed detectable, but of Stoic doctrine too). Long suggests that this scheme, evidently based on those produced by Plato's immediate successors in the Academy if not indeed by Plato himself, must precede in date the sort of Pythagorising system developed e.g. by Eudorus, who like later Platonists distinguishes a transcendent One from the Monad that forms a pair with the Indefinite Dyad (see further Bonazzi's discussion in Chapter 8). But thereafter, as Alexander gets into a more detailed account, often compressed and poorly organised, of the cosmos and its constituents, he deploys a whole welter of ideas apparently drawn from many different sources, Presocratic, Platonic, and post-Platonic. The entire ingenious construction, even if there is little in it after the opening section that sounds distinctively Pythagorean or 'Pythagorising', in fact 'registers an exceptional range of reading, and some authentic information, on the part of its author', and as candidate for that role, who more likely than Alexander himself?

With Eudorus in Chapter 8 we return to the *Timaeus* on the world soul, again interpreted as Pythagorean doctrine, and on ultimate principles, where as Mauro Bonazzi argues Eudorus seems to have had recourse also to the *Metaphysics*. He begins, however, with a discussion of the sense