

## Book Reviews



Abraham P. Bos, *Aristotle on God's Life-Generating Power and on Pneuma as Its Vehicle*. SUNY series in Ancient Greek Philosophy. State University of New York Press, Albany, 2018. vi + 333 pages. ISBN 9781438468297.

The title of this monograph encapsulates a new reading of Aristotle's philosophy which Abraham Bos, professor emeritus of ancient and patristic philosophy at Vrije Universiteit Amsterdam, has been developing over the past three decades. The bibliography lists more than 50 books and articles that have led up to the overall picture of Aristotle's thought presented here. Those who have followed Bos's work on Aristotle will find many familiar ideas, which are here further elaborated and synthesized and defended against rival interpretations and recent criticisms. Bos is not afraid of going against the majority view or indeed consensus. But this is putting it mildly. What he presents is nothing less than a comprehensive reading of Aristotle which fundamentally conflicts with what he calls the standard interpretation of Aristotle. Included in this project is an explanation of what went wrong in the course of 2,400 years of Aristotelian exegesis. Within the limited compass of a single review it is impossible to engage adequately with all the issues raised here, or with all the individual passages discussed.<sup>1</sup> In what follows I will limit myself to some central issues, which, I hope, will help readers form an impression of what they can expect of this book.

The usual way of reading Aristotle assigns only a marginal role to the notion of *pneuma*, literally "wind," "breath," which is used by Aristotle—who was probably influenced by contemporary medicine—in connection with an organism's internal heat and bodily functions such as voluntary motion in some biological works and the shorter works on natural philosophy (the so-called *Parva naturalia*). This "breath" is not the ordinary breath involved in respiration

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1 Right at the outset Bos provides a convenient list of passages subjected to "radically new interpretations" (9) so that his readers may know what they are in for.

but an innate, very fine kind of hot air. As such, it became an important technical concept in ancient medicine and philosophy. Thus, the Stoics saw *pneuma* not only as the substance of the soul of individual animals (including humans), but also as a cosmic principle: the World Soul, all-pervading Reason (*Logos*), or God. Later on, this “Spirit” also resonated with Christians and Gnostics. But Bos considers *pneuma* to have been already central to Aristotle’s thought. In the sublunary sphere it functions as the physical vehicle of the soul, which in humans is guided by the intellect towards its goal.<sup>2</sup> In the supralunary or astral spheres it is Aristotle’s somewhat notorious fifth element, the ether, which performs this role. The ordinary, visible body is just a corpse, but the soul, given its pneumatic vehicle, has a life after death before moving on to the celestial, etheric regions (an idea based by Bos on fragments from Aristotle’s lost works, most notably the *Eudemus*). Aristotle’s God is not just the self-absorbed Intellect of *Metaphysics* book 12 (chaps. 7 and 9), the ultimate efficient cause which moves the outermost celestial sphere as an object of desire and so by proxy the rest of the cosmos. It is the life-generating power on which everything depends in a far more direct way. Being unable to mingle directly with physical reality, the divine Intellect exerts this influence by means of the ether and, in the sublunary sphere, the human soul, which uses the *pneuma* as its instrument or vehicle. The human intellect, then, is the divine spark within us, the mark of an “awakened,”<sup>3</sup> self-conscious soul (in contrast with the soul of an animal, which acts like an automatic pilot). Bos argues that this life-bestowing capacity of the divine Intellect through the *pneuma* resulted from Aristotle’s reflection on the beginning of life, which does not start with respiration (as Plato had assumed) but at the moment of conception and so necessitated an innate *pneuma* already contained in the seed of plants and animals, including humans. This, then, also led to Aristotle’s view on the sustenance of life by God at the macrocosmic level. *Generation of Animals* 2.3.36b29–39 may certainly count as a trump card in support of Bos’s argument—this relatively brief passage brings together most of its key concepts: the external *nous* or intellect (external because it does not involve physical or bodily activity), the soul as

2 It is this guiding power which according to Bos is indicated by the term *entelecheia*, which was coined by Aristotle and is usually translated “actuality” or “actualization,” but which Bos usually leaves untranslated (*entelechy*), seeing it as the soul’s “goal-pointing system” (e.g., 284–285). For a discussion of the term’s meaning in the light of the ancient Greek idiom, see Graham (1989), who proposes “being complete,” “being successful,” while pointing out that Aristotle links it to *energeia* (actuality)—see *Met.* 3.1047a30–32, 8.1050a21–23.

3 This is another of Bos’s new interpretations of “a sentence that has always been misunderstood” (285), viz., *De an.* 2.1.22–23.

involving a more divine physical substance than the four elements, and the semen as containing *pneuma*.

In the light of passages such as this Bos looks at works such as *On the Soul* (*De anima*) and in particular Aristotle's famous definition of the soul as "the first actualization [*entelecheia*]<sup>4</sup> of a natural body that has life potentially" (*De an.* 2.1.412a27–28) or the "first actualization of a natural instrumental body [*organikon sôma*]" (*De an.* 2.1.412b5–6). Here, *sôma* should not be taken to refer to the body in the ordinary sense of our visible body, as the traditional reading has it, but to the *pneuma* (and, for the supralunary sphere, the ether).

Bos (249–254) is no doubt right to insist that the rendering "body equipped with organs" for *organikon sôma* is wrong; in Aristotle's day the primary meaning of *organon* was still felt to be "instrument." "Body equipped with organs" is inelegant and misleading anyway, suggesting that the body is something different from its organs (cf. King 2007, 323). But if so, reading "instrumental body" does not tell in favor of taking it to be the *pneuma*. Aristotle may describe the whole body in the ordinary sense as an instrument of the soul. In fact, Aristotle explains in the immediately following context that the expression also applies to plants in terms of their different parts (*De an.* 2.1.412b1–8), which confirms—or so it seems—that we were right in thinking of the body as instrumental in the sense that it is made up of body parts (i.e., organs) that fulfill different functions in animals, functions which taken together make them what they are—a particular kind of animal. Bos, however, brands this passage as non-Aristotelian, viz., an insertion by someone who followed the hylomorphic interpretation by the later ancient commentator Alexander of Aphrodisias (on whom see further below) (pp. 245–248). Now, it is true that explanatory notes and glosses often crept into classical texts. But such notes may also have been inserted by Aristotle himself. It is also true that the text of *De anima* is often uncertain and that commentators such as Alexander played a role in shaping what became the standard text. Still, one may feel that Bos—who seems less critical when it comes to using complete treatises of dubious authenticity—goes too far in reading the *pneuma* into the first passage and removing the second passage as unwelcome to his preferred interpretation. In fact, we find a similar explanation of the soul as the form (*eidōs*) of animals in terms of body parts or organs without reference to the *pneuma* in another well-known passage, namely, the opening chapter of *Parts of Animals* (*PA* 1.1.41a15–21). Thus, the instrumental body of the first chapter of the second book of *On the Soul* may be the (properly pneumaticized) body rather than the *pneuma* itself (see Reeve 2017, xxiii–xxiv). But what about the references to *pneuma* in *Generation*

4 See note 2 above.

of *Animals* and elsewhere? Maybe we should accept that it is not always possible to reconcile statements from different parts of Aristotle's work—a point to which I will return in due course.

Aristotle can hardly count as a little-read author. In fact, he may be one of the most intensively read philosophers in the history of Western philosophy. So why did the world have to wait two millennia for the correct reading of phrases such as “the instrumental body” to be revealed? Here Bos's argument reads like a good detective story in which a widely ramified conspiracy is exposed. The bad guy is the early third-century CE Aristotelian author and commentator Alexander of Aphrodisias, who, according to Bos, developed the hylomorphic<sup>5</sup> reading of Aristotle's view of the organism in the light of the definition of the soul as the form of the body (see above), taking *body* in the sense of the ordinary, visible body. So great were Alexander's influence and reputation for orthodoxy that he succeeded in marginalizing if not oppressing the *pneuma* as the key to understanding Aristotle (242–243, 248).

But what about Alexander's predecessors in the Peripatetic school? The admittedly fragmentary evidence suggests that Bos's exclusive focus on Alexander is not justified. The doxographer Aetius (first or second century CE) gives among views on the soul's substance that of the first-century BCE Peripatetic Xenarchus and “some others of the same school”: “Xenarchus the Peripatetic and some others of the same school hold that [the soul] is in itself the completion and actualization according to [or: in the sense of] form while at the same time having been linked to the body.”<sup>6</sup> Here too Bos could maintain that “body” refers to the *pneuma*. But this would have been unclear to readers of this doxographic lemma and so is extremely unlikely. It is hard to read it otherwise than as a statement of hylomorphism. Even so, studies by Sharples and others in the Peripatetic tradition between Aristotle and Alexander have brought to light various proposals as to how exactly “form” in Aristotle's definition of the soul is to be understood, with some, such as Strato, Aristoxenes, and Dicaearchus, explaining it as a kind of attunement (*harmonia*) of the body (whether of the limbs or the physical elements), in spite of Aristotle's own criticism of this idea (*De an.* 1.4) (see, e.g., Sharples 2009). So these Aristotelians of

5 *Hylomorphism* is a modern coinage referring to the doctrine that the soul is the form (*morphê*) of the body taken as its matter (*hylê*) in accordance with Aristotelian causal theory. Bos, then, denies that this is a correct determination of the body–soul relation in Aristotle.

6 Ξέναρχος ὁ Περιπατητικὸς καὶ τινες ἕτεροι τῆς αὐτῆς αἰρέσεως τὴν κατὰ τὸ εἶδος τελειότητα καὶ ἐντελέχειαν καθ' ἑαυτὴν οὖσαν ἅμα καὶ μετὰ τοῦ σώματος συντεταγμένην (Aetius 4.3.10, in Diels [1879, 388]). For the phrase translated “linked to the body” see Plato, *Leges* 903d. For “actualization,” see note 2 above.

the Hellenistic period seem to have been engaged in various attempts to make sense of Aristotle's definition of the soul as the form of the body, taking into account developments in the life sciences of the Hellenistic era, but not necessarily by reference to the *pneuma*.

A key witness from the imperial age is Galen of Pergamum (129–c. 216 CE), who was about a generation older than Alexander and who is conspicuously absent from Bos's account. Though not an adherent of the Peripatetic (or any other) school, Galen was thoroughly familiar with Aristotle's work through his philosophical education and close contacts with Peripatetics. Aristotle's *On the Parts of Animals* was Galen's personal favorite and stood model for his own *On the Use of Parts* (i.e., of human beings)—see, e.g., book 1.1 for an account of how organs such as the hand function as instruments for the soul, linking structure to function in a way showing God's providential design. Galen also integrates *pneuma* in his system of physiology and considers its claim to be the substance or the vehicle of the *psyche*, but he does not characterize the latter option as Aristotelian (*De placitis Hippocratis et Platonis* 7.3.23). In another work, *Quod animi mores corporis temperamenta sequantur* (QAM 4.774 Kühn), Galen explains Aristotle's view of the natural body in hylomorphic terms, that is to say, with soul as its form, which according to Galen must refer to the mixture of the four elementary qualities. Likewise, at QAM 4.782–783 Kühn, he says that Aristotle considers the soul to be “being” (*ousia*) in the sense of form, to be understood as the mixture of the four elements. Interestingly, he refers to the (first-century BCE) Aristotelian Andronicus of Rhodes on the meaning of Aristotle's definition of the soul as form of the body. Andronicus said it is either the mixture of elements or the power following on the mixture. Galen sees the first option as coinciding with his own preference. The *pneuma* is mentioned, but only in connection with the Stoic view in what follows (*ibid.*, 784): the Stoics, Galen argues, take the soul to be the *pneuma* but strictly speaking their analysis amounts to the same thing—it is the particular mixture of qualities that makes the *pneuma* a soul. This can be explained (un-Stoically) in terms of the distinction between form and matter, too. In sum, Galen does not associate *pneuma*—as an instrument or whatever—with Aristotle but with the Stoics and the hylomorphic reading with Aristotle and some Peripatetics. The hylomorphic reading, then, is older than Alexander of Aphrodisias: Galen's tracing it back to Andronicus attests to this. Alexander had predecessors in reading Aristotle along hylomorphic lines.

I now proceed to another salient feature of Bos's argument. His thesis that the *pneuma* is the lynchpin of Aristotle's philosophy rests in part on his accepting the treatise *On the Pneuma* (*De spiritu*, translated “On the life-bearing spirit” by Bos) as genuinely Aristotelian. Likewise, he corrects the prevalent

interpretation of Aristotle's notion of God, i.e., the divine Intellect, in light of another treatise of disputed authenticity, the *On the Cosmos to Alexander* (i.e., the Great), also known under its Latin title *De mundo*. In this treatise, the appellation "the Begetter" for God is taken by Bos to cohere with the ideas on the seed and the beginning of life he develops on the basis of the undisputed *Generation of Animals*. Bos dutifully refers to those who have argued in favor of the inauthenticity of these treatises. Still, one may feel that he sometimes gives rather short shrift to their contributions—although it is only fair to say that he addressed the issue more fully in previous publications.

Thus, reviewing the debate on *On the Cosmos* on page 98 Bos mentions the study of the (in part statistically established) linguistic and stylistic features of the tract by D. M. Schenkeveld (1991),<sup>7</sup> who concludes that this treatise is not by Aristotle and should probably be dated to the period 350–250 BCE (which still means that it could be contemporaneous with Aristotle's own writings). Linguistic features are crucial to debates like this because they constitute relatively "firm ground" as compared to doctrinal comparisons—which, though often less conclusive, should not be discounted either (e.g., the presence of Stoic notions).<sup>8</sup> But Bos (98n2; cf. 6n7) brushes aside the evidence adduced by Schenkeveld: "This ... raises a problem: Which anonymous and highly skilled author in this period would want to present his own ideas as Aristotelian in this way and why?" This is hardly a damning point. Apart from the degree of skill shown by the author (about which opinions differ), there can be a variety of reasons why someone wrote such a tract and put it under the name of a great authority. Such doubts and disputes arise precisely because pseudepigraphy was such a common phenomenon in classical antiquity: apart from Aristotle, Hippocrates, Plato, Plutarch, the apostle Paul, and Galen, to give only a few examples, inspired tracts which were included in the corpora of their writings. The author of *On the Cosmos* could have been motivated by a wish to provide a Peripatetic answer to the Platonic *Timaeus* or, more likely perhaps, to engage with post-Aristotelian developments such as Stoicism, just as, say, the pseudo-Platonic *Letters* were composed to address, in Plato's name, criticisms of and debates on his genuine writings. In other words, pseudepigraphy was a means of influencing the exegesis (and so, in fact, a form of exegesis) of the

7 Cf. also the more recent overview of the debate and judicious observations by J. C. Thom (2014, 4–8).

8 Schenkeveld's contribution in fact answers a call from Jonathan Barnes (1977) to use this type of evidence. Doctrinal arguments are tricky and can lead to circular reasoning: thus when Stoic elements in a disputed Aristotelian tract are detected the upholder of authenticity can argue that they prove that the Stoics were influenced by Aristotle: see, e.g., p. 147.

original expositions of the authority in question. Likewise, Bos (7n8) speaks as if Gregoric and Lewis (2015) date the *On the Pneuma* only on the basis of the occurrence of the name *Aristogenes* (which according to Bos [282–283] playfully refers to “the offspring of Ariston,” i.e., Plato) whereas in fact they see the large number of terms that cannot be paralleled from the undisputed treatises as their strongest point in favor of inauthenticity.

Bos diverges from the mainstream approach to Aristotle not just in accepting *On the Pneuma* and *On the Cosmos* as genuine. He also uses the fragments of Aristotle’s so-called exoteric<sup>9</sup> works, e.g., the *Eudemus*, with its references to the afterlife and the immortality of the soul. The majority of interpreters of Aristotle virtually ignore these fragments—i.e., quotations and testimonies from post-Aristotelian sources—because the exoteric works were dialogues and so cannot teach us anything with certainty about Aristotle’s own view and insofar as his view may shimmer through they reflect a juvenile, Platonizing phase. Bos denounces this way of turning a blind eye to what he sees as crucial evidence. The main culprit is Werner Jaeger, an influential German scholar and humanist, who convinced many serious scholars that the *On the Pneuma* was not by Aristotle, but a product of the post-Aristotelian school (Jaeger 1913). Worse, he was influential in advocating a new, developmental approach to the study of Aristotle in his monograph *Aristoteles. Grundlegung einer Geschichte seiner Entwicklung* (Jaeger 1923). Until its appearance Aristotle had been studied mainly as a system builder: interpreters took it as their job to reconstruct a coherent conceptual edifice out of the building blocks provided by the surviving works and fragments, a legacy of medieval Scholasticism. Jaeger put an end to this approach, presenting a three-phase account of Aristotle’s development. As a young man, while studying with Plato (an accepted biographical fact), Aristotle shared the latter’s interest in metaphysics, transcendence, and immortality and wrote about these themes in Platonic-style dialogues (no longer extant except for fragments). Upon Plato’s demise, his nephew Speusippus became head of the Academy. For Aristotle began a period of wandering and engaging in biological fieldwork on the island of Lesbos and elsewhere. After this scientific interlude he returned to Athens and founded his own school, the Lyceum. This third Jaegerian phase is represented by extant treatises that show an Aristotle who has become fully emancipated from the Platonic legacy

9 *Exoteric* is a term taken to refer to (lost) works meant for publication outside the school, as opposed to the *esoteric* works that were for use within the school, i.e., the lecture treatises (or *Lehrschrifte*), which, by a stroke of historical irony, have been preserved: see further below. Bos rejects this distinction and takes the Aristotelian term *exoteric* to refer to treatises on subjects that lie outside ordinary experience: see pp. 268–269.

and is now more of an empirically minded scientist. His *On the Soul* is taken as representative of this final stage. Jaeger's reconstruction has come in for criticism and so has the very project of a developmental account.<sup>10</sup> But the lasting impact of his work is that interpreters of Aristotle no longer feel duty bound to reconstruct a system on the basis of the surviving works and fragments.

Bos presents his systematizing approach as an alternative to Jaeger's developmental account in a way that suggests that the latter is still very influential. Bos repeatedly denounces the developmental account as completely "unhistorical" and deeply flawed, but one would have wished for more methodological discussion on the issues at stake here. It is not as if in 2019 the choice still is between Jaeger and Bos. The Aristotelian corpus does not contain a coherent system, nor does it reflect three distinct phases. Rather it constitutes a literary legacy that Aristotle worked on and revised until shortly before he died: these works functioned as lecture treatises and collections of material for use within the school. If this characterization is correct, it would make it pointless to establish a chronological order among them so as to enable us to study Aristotle's development as a philosopher. We are dealing with "philosophy in motion," which only congealed when its author died.<sup>11</sup> To be sure, Aristotle developed a systematic way of thinking, using the same concepts and distinctions throughout the broad variety of disciplines which he often himself founded, ranging from logic and biology to political philosophy and literary theory. There are parts of his work in which what may be called a particular doctrine is set out. Moreover, Aristotle took from geometry the axiomatic-deductive model as an ideal for science. But at the same time he kept working on problems, reconsidering his own solutions, coming up with new insights and approaches. This is a side of Aristotle very much liked by present-day analytical philosophers: a problem-oriented ("aporetic") thinker rather than a dogmatic system builder. Not surprisingly, then, the treatises that have been formed and edited on the basis of his literary legacy may on occasion contain alternative accounts of the same subject—e.g., the two accounts of pleasure in the collection of essays that came to be known as the *Nicomachean Ethics*. So the nature of the extant texts from Aristotle does raise the question how far one can go in solving or reconciling differences of perspective or emphasis or indeed outright inconsistencies. In particular, the project of *On the Soul* and that of the biological works may represent different contexts, which helps explain why the *pneuma* in the technical sense is not mentioned in the former but is more important in the latter.

10 Cf. Barnes (1995, 16–17); see Düring (1966, 554, 558) on the *fable convenue* that Aristotle wrote his exoteric works in his younger years only, modelling them on Plato's dialogues.

11 On how to interpret Aristotle's text see also Barnes (1995, 22–26).



In Bos's book, then, the reader will find a spirited defense of the unity of Aristotle's philosophy. First, what is to be found in the biological works should be integrated with the psychological and metaphysical works, including two tracts of disputed authenticity. Secondly, the standard distinction between exoteric and esoteric works as containing two different philosophies for two different kinds of audience is wrong and should be disregarded: the fragments of the exoteric works should be included in an overall, coherent interpretation of Aristotle. Thirdly, Aristotle did not preach different philosophies during different phases of his career. Thus, Bos reads the extant works and fragments not only on the assumption that Aristotle was a system builder but also on the assumption that the system can indeed be reconstructed on the basis of our textual evidence. The lynchpin of this system is the *pneuma*, holding together a philosophy that is far more religiously inspired than the standard interpretation would have it.

Bos shows great ingenuity in developing these points. His knowledge of the Aristotelian corpus is impressive. I was particularly impressed by the light thrown by Bos on the nature of and the role played by the intellect in connection with Aristotle's teleological view of nature. Also, he is often convincing in criticizing the neglect suffered by the fragments of the exoteric works at the hand of most present-day Aristotle scholars. Part of the problem may be precisely the religious purport of some of the texts in question, which finds little favor with those interpreters who have themselves been educated to see Aristotle as one of the founders of philosophy in the secular mode prevalent in our universities today. Bos is certainly right to redress the selective and unhistorical approach that has resulted. But this is not the only reason why the book will be controversial among historians of ancient philosophy and philosophers in general. Bos's systematizing approach means that he offers us a kind of package deal involving works of disputed authenticity. Moreover, it raises certain methodological problems. For all that, the book deserves to be taken seriously as a valuable contribution to Aristotelian scholarship.

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