



Ancient Philosophy

## **Aristotle's Psychology: The Traditional (hylomorphistic) Interpretation Refuted**

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**ABSTRACT:** The psychology of Aristotle has never been understood in a historically correct way. A new interpretation of the *De anima* will be proposed in which this work can be seen as compatible with the psychology that can be reconstructed from the fragments of Aristotle's lost dialogues and the *De motu animalium* and other biological works (in which the notions of *pneuma* and 'vital heat' play a crucial role) and the doxographical data gathered from ancient writers besides the commentators. In *De anima*, II, 412b5, where *psychè* is defined as 'the first *entelecheia* of a natural body that is *organikon*,' the words 'natural body' should not be taken to mean 'the body of a living plant, animal or human being' but to stand for 'elementary body.' And the qualification '*organikon*' should not be understood as 'equipped with organs' (as it always has) but in the sense of 'serving as an instrument to the soul.' This 'instrumental body' that is inseparably connected with the soul is the seat of desire (*orexis*), which physically influences the parts of the visible body. Besides those two corrections there are the words *ta merè* in 412b18 that should be taken as meaning not 'parts of the body' but 'parts of the soul.' Aristotle is arguing there that even those parts of the soul that are not yet actualized in the embryo of a new living being can be said to be 'not without body.'

Do we really know Aristotle's psychology? This question may sound strange at first, since we have a famous book by Aristotle which is called *On the soul* and we possess quite a bit of information about a lost dialogue, the *Eudemus*, which was also subtitled *On the soul*. Yet I propose to argue that Aristotle's psychology has remained unknown up till now. And this is because since the third century AD the text of his extant work *De anima* has been interpreted in a way that runs completely counter to Aristotle's intentions. What has been held to be Aristotle's psychology is the result of the interpretation of his work put forward by Alexander of Aphrodisias in the third century AD.<sup>(1)</sup> The situation is comparable with the imaginary situation that Plato's oeuvre had been lost except for his *Parmenides* and that we only possessed the information of Plotinus for a reconstruction of Plato's thought.

To make a convincing case for this revolutionary theory, I will argue three propositions.

(1) The traditional attribution of the so-called hylomorphistic psychology to Aristotle is based exclusively on the standard interpretation of the text of *De anima* II, 1.

(2) This standard interpretation of the text of *De anima* II, 1 is demonstrably incorrect because it is based on a mistaken interpretation of the words *sômata physika* ('natural bodies' - 412a11) and *organikon* (412a28 and b6), which Aristotle uses in his definition of the soul, and on a misinterpretation of the words *ta merè* ('the parts' - 412b18) in what follows shortly.

(3) The incorrectness of the standard interpretation is also shown by the fact that the psychological theory it has produced is incompatible with Aristotle's position in the other works of the extant Aristotelian *Corpus* and with that of his lost writings. Moreover, there is no trace of this traditional, so-called hylomorphistic interpretation in reports about Aristotle from the first five centuries after his death.

In my own, alternative explanation of Aristotle's intentions his psychology is best characterized as 'cybernetic instrumentalist': Aristotle conceived of the soul as the immaterial, leading principle of a special 'natural body' (*sôma physikon*) which serves the soul as an instrument (*organon*) for the formation, vitalization, and motion of the visible body. This view was not just developed and argued by Aristotle in a particular phase of his career but is the conception of his lost writings and of his extant biological works and of his extant work *De anima*.

It is an understatement to say that the state of the modern debate about Aristotle's theory of the soul is a rather confused one.<sup>(2)</sup>

(a) In his lost dialogue the *Eudemus* Aristotle talked about 'the soul'. There is undeniable information that he talked there about man's death as a 'return home' of the human soul and that he gave arguments supporting the conviction that the soul continues to exist after the death of the individual.<sup>(3)</sup>

(b) The surviving work *De anima* seemed to have advanced an entirely different view. In this work Aristotle is thought to have developed the final version of his psychology, that is to say, to have regarded every specimen of plant, animal, or human being as a unity and compound of form (*morphè*) and matter (*hylè*). And he supposedly assumed an inseparable connection between these two, form and matter. This interpretation of the psychology of *De anima* has always been called 'hylomorphistic'.

(c) To complicate matters yet further Aristotle wrote a number of works on animals and human beings, and these works strikingly locate the soul in a particular central place of the living creature (the heart or an analogous central organ). The (immaterial) soul is always closely connected with a physical substance which Aristotle calls *pneuma* in higher animals and 'vital heat' in lower animals and plants. This *pneuma* or vital heat is repeatedly presented in these works as the instrument (*organon*) of the soul.

(d) Finally, there is information in Cicero who reports that Aristotle regarded the soul as immortal and eternal and as consisting of a special divine, fifth element or *quinta essentia*.<sup>(4)</sup>

Let us now have a critical look at the traditional interpretation of *De anima* II, 1. In this chapter Aristotle, after critically discussing all psychologies of predecessors known to him, develops his own alternative. Arguing step by step, he arrives at the following definition of

'soul': '(the soul is) the first entelechy of a natural body (*sôma physikon*) which potentially possesses life and which is *organikon*'.<sup>(5)</sup>

The term *entelechy* here is a technical philosophical term devised by Aristotle<sup>(6)</sup> to designate the form which, as the ultimate goal (*telos*), leads the entire development of an individual living creature from the stage of fertilization.

How, then, does the traditional interpretation explain this definition?

Almost everybody interprets it as follows: 'the soul is the first entelechy of a natural body which potentially possesses life and is equipped with organs'.<sup>(7)</sup> This means: almost everybody interprets 'natural body' as the visible body of a plant, an animal, or a human being. And this body is regarded as consisting of a number of organs, i.e. parts which each have their own function. A leg is an organ for walking, an ear an organ for hearing, and a lung an organ for breathing. That is to say: scholars assume that Aristotle observed concrete plants, animals, and human beings, and wondered in what way they differ from for instance a bronze statue. And his answer was supposedly that the difference lies in the soul as formative principle.<sup>(8)</sup> But this view fails to consider that Aristotle devoted his lengthy work *De generatione animalium* to the question: how does the visible body of a plant, an animal, or a human being develop from a situation in which no part of this visible body is present and there is only sperm from the father specimen and menstrual blood from the mother specimen? His principal question was: how, at this stage, is the soul the formative principle which leads the process of generation, and in such a way that the sperm of a dog never produces kittens or rabbits?<sup>(9)</sup> In Aristotle's view, Plato had signally failed to address this issue. He therefore repeatedly accuses Plato of speaking exclusively about a formal principle (the Idea) and a material principle, but never about 'the efficient cause'. Aristotle's criticism of Plato in *Metaphysics* A, 6-9 basically reproaches Plato with being a 'hylomorphist'. A comprehensive philosophy, however, does not confine itself to discussing two causes, but distinguishes four.<sup>(10)</sup>

This brings me to what I regard as the crowbar for tackling the traditional interpretation of *De anima* II, 1. It is the term *organikon* which Aristotle uses in his definition of 'the soul'. This term is also original to Aristotle<sup>(11)</sup> and is used very frequently by him. And in his work it *never* means 'equipped with organs' but always: 'serving as an instrument'! Only in the two passages of *De anima* II, 1 where Aristotle uses the term *organikon* in the context of his definition of the soul<sup>(12)</sup> have interpreters since antiquity taken the word to mean 'equipped with organs'. But from a philological point of view this is totally unacceptable. One cannot, precisely at the place where Aristotle formulates the heart of his psychology, translate a crucial term in a way which has no parallel in Aristotle's entire oeuvre, while the term itself is used on countless occasions by Aristotle *in a different sense*. Aristotle's definition of the soul must therefore in any case be corrected to: 'the first entelechy of a natural body which potentially possesses life and which is instrumental'.<sup>(13)</sup>

But this raises the question: what kind of body is meant? If we had to call the entire body of a plant, animal, or human being 'instrumental', in the context of Aristotle's views this is only possible in the sense of 'instrumental for' reproduction. But the question is whether this biotic aspect of life would be emphasized so strongly by Aristotle in his definition of 'soul'.

We should therefore consider that Aristotle speaks rather frequently about a very special *sôma* which is the 'instrument' for the soul, namely the *pneuma* (or its analogon). When he

wants to explain how the immaterial soul is able to cause me to move my legs in order to be able to hit a tennis ball, Aristotle introduces *pneuma* as the *sôma* which is the vehicle of desire (*orexis*) and which mediates between the soul and the visible body. He does this most explicitly in *De motu animalium*. But he argues the same theory in *De anima* III, 10.<sup>(14)</sup> If we bear these discussions by Aristotle in mind and remember that Aristotle emphatically declares that *pneuma* is the essential component of sperm and can be characterized as 'warm air',<sup>(15)</sup> we may and should seriously consider that Aristotle's definition of 'the soul' means: '(the soul is) the first entelechy of an elementary natural body which potentially possesses life and which is the instrument of the soul'. And the reason why in *De anima* he does not use the word *pneuma* but the more general description is that in *De anima* he is discussing not just animals and man but all entities possessing life (plants included).

But in that case we are talking about an entirely different 'natural body' compared with the traditional explanation of Aristotle's definition. In that case we take the 'natural body' to be one of the five natural elements distinguished by Aristotle. And we can then surmise that he regarded the fifth element (Cicero's *quinta essentia*) as the 'instrument of the soul' of the celestial beings in the heavenly regions and that he regarded *pneuma* (which he describes as 'warm air' but which also contains a part of the celestial element and is always connected with an (immaterial) soul-principle) or its analogon in lower animals and plants as an 'instrument of the soul' in the sublunary sphere. And it is then clear that Aristotle also regards *pneuma* (or its analogon) as the 'instrumental body' by means of which the soul produces the visible body of the concrete living creature, including all its instrumental parts.

But this means that, in relation to the soul, Aristotle distinguishes between the (immaterial) soul-principle proper on the one hand and an (instrumental) soul-body on the other hand, which in an inseparable combination of an substantial unity is the life-producing principle for the visible, concrete body.

Only in this way could Aristotle solve the problem which confronted him after he had criticized Plato for presenting the (immaterial) soul as the principle of automotion.<sup>(16)</sup> In Aristotle's view, motion is proper to bodies (*sômata*).<sup>(17)</sup> This means that he could not explain the motion of the visible, concrete body as a direct effect of the immaterial soul, but only as an effect of the instrumental natural body of the soul, which reacts to the *dynamis* (the power) proceeding from the soul. The traditional interpretation of the *De anima* denies this 'instrumental *sooma*' to Aristotle. But in doing so it causes the criticism of Plato and the Platonists for their neglect of an efficient cause to lose its foundation. So we should take it that Aristotle thought the immaterial soul-principle to be the unmoved mover of its instrumental body, that in its turn produces, uses and moves the visible body.

There is a further consequence. When Aristotle declares that the soul is 'not without body',<sup>(18)</sup> he does not imply that the soul can never exist separately from the visible body. This new interpretation explicitly leaves scope for a theory in which (at least in the case of human beings) the soul plus the soul-body leaves the mortal, decaying visible body, but continues to exist and 'returns home', as Aristotle argued in his *Eudemus*.

The substantial unity of the soul as formative principle and its instrumental *sooma* is illustrated in the following section of *De anima* by the striking examples of an *organon*, an axe, and an *organikon meros*, an eye.<sup>(19)</sup> But the example of the eye (which is also an eye when it is closed) has always been misinterpreted. Aristotle's point in this crucial passage is

to show that the soul in the sperm of an animal or a human being is inseparably connected with the instrumental soul-*sôma*, including those *parts of the soul*<sup>(20)</sup> which have not yet been actualized in that sperm and in the developing embryo (i.e. the sensitive and the motory parts of the soul). The instrumental body can also be referred to as 'possessing a potentiality for life' because the higher parts of the soul are only gradually actualized in the soul-body of the higher living creatures.

So how did the spectre of a hylomorphistic psychology in the traditional sense find its way into the interpretation of Aristotle? We should consider here that both the Stoa and the Epicureans rejected the notion of immaterial principles. The Stoa adopted Aristotle's *pneuma* without talking about an immaterial formative principle like entelechy. But they did maintain a contrast between the soul-*sooma* (*pneuma*) and the visible body of animals and human beings. This latter body was gradually also designated as the *organikon sôma*,<sup>(21)</sup> in the sense of the (animal or human) body which is differentiated by possessing instrumental parts. When the work *De anima* came back into circulation in the first century BC, it is understandable that the term *organikon sôma* was misunderstood.

In conclusion we can say that the traditional interpretation of *De anima* interprets the work as if it is not a work *On the soul* but *On ensouled substances* or *On living creatures*.<sup>(22)</sup> This interpretation of *De anima* attributed a psychological conception to Aristotle which is incompatible with the content of his writings and with the state of the discussion in his time.

My alternative interpretation enables a view of all the facets of Aristotle's philosophizing about life and living creatures as meaningfully connected with and based on his own creative, new, and consistent psychology.<sup>(23)</sup>

This view also shows that the theory of the pneumatic soul-body or soul-vehicle was not just a Neoplatonic innovation but a theme introduced by the philosopher of Stagira himself, as was affirmed by Proclus.<sup>(24)</sup> Aristotle, indeed, thought of the soul in its *ochêma* as of a boatman in his ship.<sup>(25)</sup>

## NOTES

(1) Although Alexander's interpretation has been fiercely attacked by Iamblichus, Simplicius (Priscianus?) and Philoponus it has been accepted in modern scholarship as the orthodox Peripatetic one.

(2) Cf. R. Sorabji, 'From Aristotle to Brentano: the development of the concept of intentionality', in H.J. Blumenthal, H. Robinson (eds), *Aristotle in the later tradition* (Oxford, 1991), 227: "Aristotle's *On the Soul* or *De anima* is probably the most variously interpreted of his works". C. Shields, 'Soul and body in Aristotle', *Oxf. Stud. in Anc. Philos.* 6 (1988), 103-137, p. 103: '... virtually no progress toward a consensus has been attained. On the contrary, one finds an alarmingly large and diverse literature on Aristotle's account of soul/body relations'.

(3) Arist., *Eudemus* fr. 1 and 6 in *Aristotelis Fragmenta Selecta*, recog. brevique adnotatione instruxit W.D. Ross (Oxford, 1955; repr. 1964); 56 and 65 in *Aristotelis Opera*, vol. III *Deperditorum librorum fragmenta*, collegit O. Gigon (Berlin, 1987). See also Boëthius of Sidon, in *Simpl.*, *In Ar. anim.*, p. 247, 24; Hippol., *Ref.* I, 20, 3-4; 6; Proclus, *In Pl. Tim.*, III, 238, 19 (ed. E. Diehl) and Philop., *In Ar. anim.* 12, 20.

- (4) Arist., *De philosophia* fr. 27 Ross; fr. 994; 995; 996 and test. 18, 1 Gigon.
- (5) Arist., *Anim.* II, 1, 412b5: ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὀργανικοῦ.
- (6) Cf. D.W. Graham, 'The etymology of "Ἐντελέχεια"', in *Am. J. of Philol.* 110 (1989), 73-80; G.A. Blair, 'Aristotle on ἐντελέχεια. A reply to Daniel Graham', *Am. J. of Philol.* 114 (1993), 91-97.
- (7) See for example Alex. Aphrod., *Anim.*, 16, 11; Philop., *In Ar. anim.* 217, 13; R.D. Hicks (1907): 'furnished with organs'; D.W. Hamlyn (1968): 'which has organs'; J.M. Rist, 'On Greek biology, Greek cosmology and some sources of theological *pneuma*', in *Prudentia*, suppl. vol. VI (Auckland, 1985), 27-47, p. 28 'equipped with organs'; repr. in id., *Man, soul and body. Essays in ancient thought* (Aldershot, 1996).
- (8) Cf. W. Jaeger, *Aristotle. Fundamentals of the history of his development*, transl. by R. Robinson (Oxford, 1934; 2 1948; repr. 1962), 45: 'The soul is substance only as being "the entelechy of a natural body possessing life". It is not separable from the body and therefore not immortal; but in connection with the body it is the formative principle of the organism'. The English text mistakenly reads here 'formulative'. The German text has: 'das gestaltende Formprinzip'.
- (9) Arist., *Gener. anim.* I, 17ff.
- (10) Arist., *Metaph.* A, 6, 988a9; 9, 991a11; 991a22; 991b3-5. Cf. *Gener. corr.* II, 9, 335a30.
- (11) Cf. S. Byl, *Ant. Class.* 40 (1971), 132.
- (12) Arist., *Anim.* II, 1, 412a28 and b6. In II, 9, 432b18 and b25, however, the word again means just 'instrumental'.
- (13) In this sense the expression has been taken by Plutarch of Chaeronea, *Quaest. plat.* 8, 1006b-d and Diog. Laertius, V, 33. After Alexander of Aphrodisias Iamblichus and Simplicius (Priscianus?) have, again, taken the term to mean 'instrumental'. It can be proved that this is also the way in which Hippol., *Ref.* VII, 24, 1-2 understood the same definition. This must also be the import of *Anim.* I, 3, 40b13-26, which ends with the conclusion: 'For the craft must use the (its) instruments and the soul the (its) body'.
- (14) Arist., *Motu anim.* 10, 703a4-b2; *Anim.* III, 10, 433b19. See also I, 3, 407b25-26; *Gener. anim.* I, 22, 730b10-22.
- (15) Arist., *Gener. anim.* II, 2, 735b37.
- (16) For this criticism, see Arist., *Anim.* I, 3.
- (17) Cf. *Cael.* I, 9, 279a15.
- (18) Cf. *Anim.* I, 1, 403a6.
- (19) *Anim.* II, 1, 412b11-413a3.

(20) The topic of the 'parts of the soul' has been announced in *Anim.* I 1, 402b1-8 as the second important question to be discussed in relation with the soul.

(21) E.g. in Philo Alex., *Leg.* I, 4; *Ebr.* 111; *Opif.* 102; *Sacr.* 98.

(22) But Aristotle clearly distinguished between these two in the first sentence of his *De sensu* 1, 436a1-4.

(23) See for a more detailed exposition of this new hypothesis my papers "Aristotle's *De anima* II, 1: the traditional interpretation rejected", in D. Sfendoni-Mentzou (ed.), *Aristotle and contemporary science* (Frankfurt a. M. 1999) vol. 2 and 'Why the soul needs an instrumental body according to Aristotle (*Anim.* I, 3, 407b13-26)', in *Hermes* 127 (1999).

(24) Procl. *In Pl. Tim.* (ed. E. Diehl), III, 238, 19: ὄχημα . . . πνευματικόν, οἶον καὶ Ἀπιστοέλης ὑπέλαβε συνεξίον τῷ ἀθανάτῳ τῷ ἐν ἡμῖν καὶ συνείον, θνητὸν δὲ ὅμως ὄν . . .

(25) See *Anim.* II, 1, 413a8-9 that to modern commentators have always presented an insurmountable obstacle.